


**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER RW 5C1-23B							
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT RED WASH							
4. TYPE OF WELL Gas Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						5. UNIT or COMMUNITIZATION AGREEMENT NAME RED WASH							
6. NAME OF OPERATOR QEP ENERGY COMPANY						7. OPERATOR PHONE 303 308-3068							
8. ADDRESS OF OPERATOR 11002 East 17500 South, Vernal, Ut, 84078						9. OPERATOR E-MAIL debbie.stanberry@qepres.com							
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU082			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>							
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')							
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')							
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>							
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN	
LOCATION AT SURFACE		1759 FSL 2106 FWL		NESW		23		7.0 S		23.0 E		S	
Top of Uppermost Producing Zone		2153 FNL 343 FWL		SWNW		23		7.0 S		23.0 E		S	
At Total Depth		2153 FNL 343 FWL		SWNW		23		7.0 S		23.0 E		S	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 343			23. NUMBER OF ACRES IN DRILLING UNIT 1280							
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 7450			26. PROPOSED DEPTH MD: 11510 TVD: 11135							
27. ELEVATION - GROUND LEVEL 5625			28. BOND NUMBER ESB000024			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE A-36125/ 49-2153							
<b>Hole, Casing, and Cement Information</b>													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement			Sacks	Yield	Weight	
Surf	12.25	9.625	0 - 3838	40.0	N-80 LT&C	0.0	Halliburton Light , Type Unknown			460	3.12	11.0	
							Halliburton Premium , Type Unknown			270	1.47	13.5	
I1	8.5	4.5	0 - 6446	11.6	HCP-110 LT&C	9.5	No Used			0	0.0	0.0	
Prod	7.875	4.5	0 - 11510	11.6	HCP-110 LT&C	10.5	Halliburton Light , Type Unknown			680	3.18	11.0	
							Halliburton Premium , Type Unknown			590	1.65	13.5	
<b>ATTACHMENTS</b>													
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>													
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN							
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP							
NAME Valyn Davis				TITLE Regulatory Affairs Analyst				PHONE 435 781-4369					
SIGNATURE				DATE 01/30/2012				EMAIL Valyn.Davis@qepres.com					
API NUMBER ASSIGNED 43047523120000				APPROVAL  Permit Manager									

RECEIVED: February 14, 2012

QEP Energy Company  
 RW 5C1-23B  
 Uintah County, Utah  
 SHL: 1759 FSL & 2106 FWL, Section 23, T7S, R23E  
 BHL: 2153 FNL & 343 FWL, Section 23, T7S, R23E

## DRILLING PROGRAM

### ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

#### 1. Formation Tops

The estimated top of important geologic markers are as follows:

<u>Formation Name</u>	<u>TVD (ft, RKB)</u>	<u>MD (ft, RKB)</u>
Duchesne River/Uintah	0	0
Green River	2871	2984
Mahogany	3785	3785
Estimated Btm of Mod Saline Water	5516	5806
Wasatch	6116	6446
Mesaverde	8312	8687
Sego	10835	11210
TD	11135	11510

#### 2. Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones

The estimated depths at which the top of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered as follows:

<u>Formation Name (Substance)</u>	<u>Depth (ft, TVD)</u>	<u>Depth (ft, MD)</u>
Green River (Oil)	2871	2984
Wasatch (Gas)	6116	6446
Mesaverde (Gas)	8312	8687
Sego (Gas)	10835	11210

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

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All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right A36125 (which was filed on May 7, 1964) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at LaPoint Recycling and Storage in Section 12, T5S R19E of Uintah County, UT or Red Wash Disposal site; SESE, Section 28, T7S, R23E or West End Disposal Site; NESE, Section 28, T7S, R22E.

**3. Operator's Specification for Pressure Control Equipment**

- A. An 11" 5000 psi double ram with blind rams and pipe rams, annular preventer and drilling spool or BOP with 2 side outlets.
- B. All BOP connections subject to pressure shall be flanged, welded or clamped.
- C. Kill line (2" min), 2 choke line valves (3" min), choke line (3" min), 2 kill line valves (2" min) and a check valve, 2 chokes with one remotely controlled from rig floor and a pressure gauge on choke manifold.
- D. Upper and Lower Kelly cock valves with handles and safety valve and subs to fit all drill string connections.
- E. IBOP or float sub available.
- F. Fill up line must be installed above the uppermost preventer.
- G. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 5M system and individual components shall be operable as designed.

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#### 4. Casing Design:

Hole Size (in)	Csg. Size	Top (MD)	Bottom (MD)	Wt. (ppf)	Grade	Thread	Cond.	Expected MW(ppg)
22	16	Sfc	40	Steel	Conductor	None	Used	N/A
12.25	9.625	Sfc	3838	40	N-80	LTC	New	Air
8.5	4.5	Sfc	6446	11.6	HCP-110	LTC	New	9.5
7.875	4.5	Sfc	11510	11.6	HCP-110	LTC	New	10.5

Casing Strengths						
OD (in)	Wt (ppf)	Grade	Thread	Collapse (psi)	Burst (psi)	Tensile (kips, min)
9.625	40	N-80	LTC	3090	5750	727
4.5	11.6	HCP-110	LTC	8830	10710	279

#### Casing Design Factors

\*The casing prescribed above meets or exceeds the below listed design factors.

Burst: 1.2

Collapse: 1.2

Tension: 1.6

Maximum anticipated mud weight: 10.5 ppg

Maximum anticipated surface treating pressure: 7,200 psi

#### 5. Cementing Program

##### 9-5/8" Surface Casing:

	<u>Lead</u>	<u>Tail</u>
Top of Slurry (ft, MD):	0	3000
Bottom of Slurry (ft, MD):	3000	3000
Weight (ppg):	11.0	13.5
Yield (ft <sup>3</sup> /sk):	3.12	1.47
% Excess (Open Hole Only):	50%	50%
Volume (ft <sup>3</sup> ):	1410	394
Volume (Sacks):	460	270



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**4-1/2" Production Casing\*:**

	<b><u>Lead</u></b>	<b><u>Tail</u></b>
Top of Slurry (ft, MD):	3000	8687
Bottom of Slurry (ft, MD):	8687	11510
Weight (ppg):	11.0	13.5
Yield (ft <sup>3</sup> /sk):	3.18	1.65
% Excess (Open Hole Only):	50%	50%
Volume (ft <sup>3</sup> ):	2140	968
Volume (Sacks):	680	590

\*Final cement volumes to be calculated from caliper log, if run.

**6. Auxiliary Equipment**

- A. Kelly Cock – yes
- B. Float at the bit – Yes
- C. Monitoring equipment on the mud system – PVT/Flow Show
- D. Full opening safety valve on the rig floor – Yes
- E. Rotating Head – Yes
- F. Request for Variance:

Drilling surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 50' or deeper into the Mahogany Bench formation and high pressures are not expected.

1. **Properly lubricated and maintained rotating head** – A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
2. **Blooi line discharge 100 feet from wellbore and securely anchored** – the blooi line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.

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3. **Automatic igniter or continuous pilot light on blooie line** – a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
5. **Well Kill Fluid** – A suitable amount of water and weighting agents will be available in the reserve pit during air drilling operations to kill the well, if necessary. No overpressured zones are expected in the area.
6. **Deflector on the end of the blooie line** – QEP will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.
7. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.

G. Drilling below the 9-5/8" casing will be done with water based mud. Maximum anticipated mud weight is 10.5 ppg.

H. No minimum quantity of weight material will be required to be kept on location.

I. Gas detector will be used from intermediate casing depth to TD.

7. **Testing, logging and coring program**

A. Cores – none.

B. DST – none anticipated

C. Logging – Mud logging – Intermediate Casing to TD  
OH Logs: GR-SP-Induction, Neutron Density.

D. Formation and Completion Interval:

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– Stimulation will be designed for the particular area of interest as encountered.

8. **Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated.

Maximum anticipated bottom hole pressure (approx, psi): 6080

Maximum anticipated bottom hole temperature (approx, deg F): 210

H2S has not been encountered in other wells drilled to similar depths in the general area.

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5M BOP STACK

Rotating Head

Spacer Spool

5M Annular

5M Double Ram

2" Kill Line  
2" 5M Check  
2" 5M Manual  
2" 5M Manual

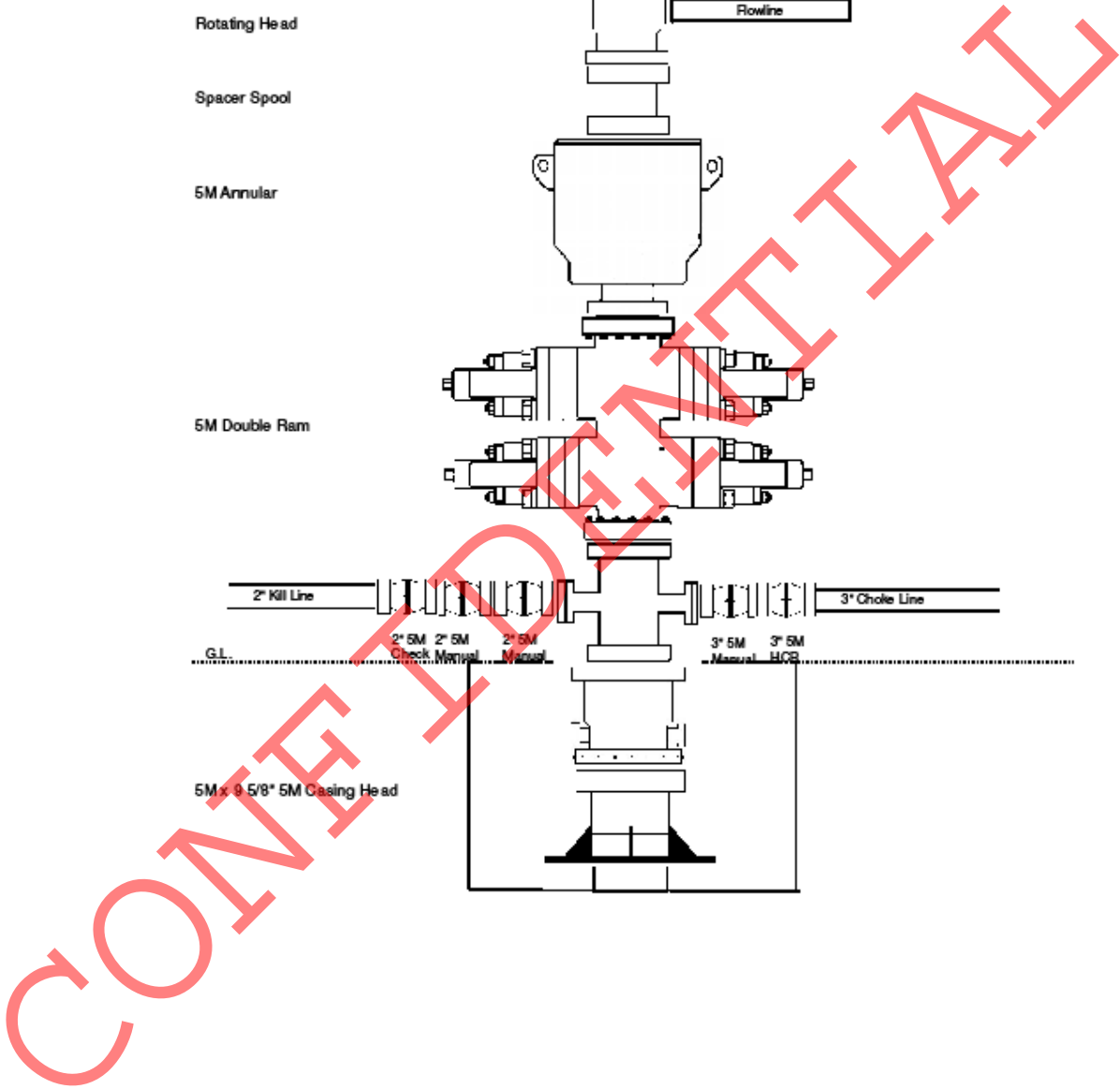
G.L.

Flowline

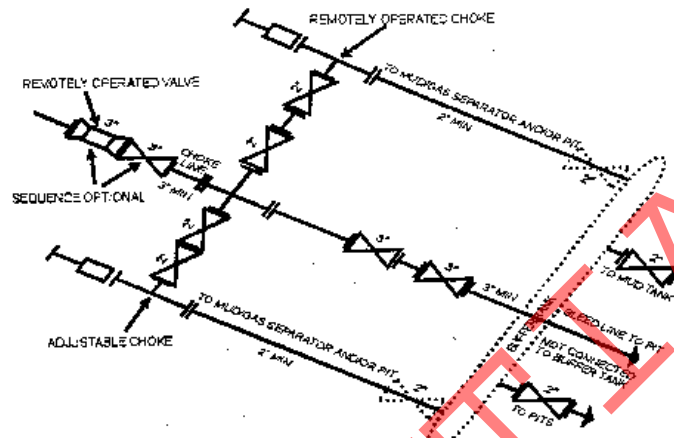
3" Choke Line

3" 5M Manual  
3" 5M HCS

5M x 9 5/8" 5M Casing Head



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5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolded the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 204, 304, 1004, OR 1504 drawings, it would also be applicable to these situations.  
 [54 FR 39528, Sept. 27, 1989]

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## WELLBORE DIAGRAM

General Information	
Pad	23-23B
Pod	4
Elevation, GL	5625
Elevation, RKB	5641

Geologic Prognosis		
Formation	TVD	MD
Duchesne River/Uintah	0	0
Green River	2871	2984
Mahogany	3622	3785
Est Btm of Mod Saline Water	5516	5806
Wasatch	6116	6446
Mesaverde	8312	8687
Sego	10835	11210
TD	11135	11510

Hole Size	From (MD)	To (MD)
12.25	0	3838
8.5	3838	6446
7.875	6446	11510

Directional Information		
KOP:	500	ft
Departure:	2230	ft
Azimuth:	307.81	deg

Casing Information				
Size	Wt	Grade	Connection	Depth (MD)
9.625	40	N-80	LTC	3838
4.5	11.6	HCP-110	LTC	11510

Conductor Information	
Conductor set @	40
Cemented to Surface	

Surface Cement			
	Top (MD)	Wt (ppg)	Volume (Sacks)
Lead	0	11	460
Tail	3000	13.5	270

Production Cement			
	Top (MD)	Wt (ppg)	Volume (Sacks)
Lead	3000	11	680
Tail	8687	13.5	590

T7S, R23E, S.L.B.&M.

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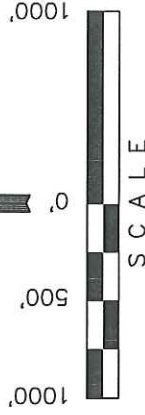
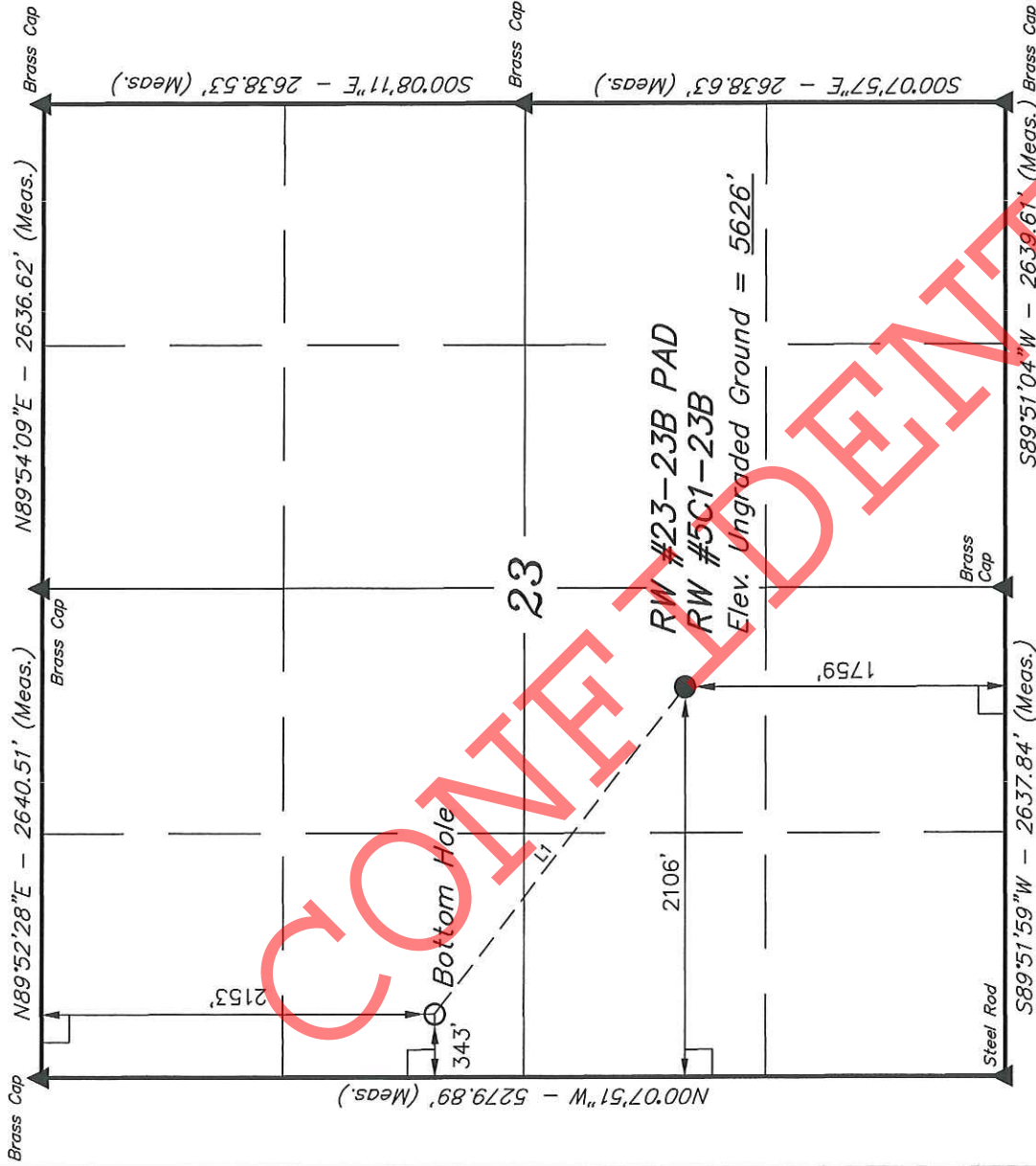
Well location, RW #23-23B PAD, Well Name  
RW #5C1-23B, located as shown in the NE 1/4  
SW 1/4 of Section 23, T7S, R23E, S.L.B.&M.,  
Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION  
35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE,  
QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD  
(TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES  
DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID  
ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

REVISED: 12-21-11

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE	1" = 1000'	DATE SURVEYED:	10-03-11	DATE DRAWN:	11-15-11
PARTY	A.F. C.A.G.	REFERENCES	G.L.O. PLAT		
WEATHER	WARM				
					FILE
					QEP ENERGY COMPANY

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

LINE TABLE		NAD 83 (SURFACE LOCATION)	
LINE	BEARING	LATITUDE	LONGITUDE
L1	N52°18'45"W	40°11'33.42"	109°17'46.43"
		NAD 27 (SURFACE LOCATION)	
		LATITUDE	LONGITUDE
		40°11'33.55"	109°17'43.98"
		STATE PLANE NAD 83 UTAH CENTRAL	
		N: 7246469.906	E: 2255980.282



**QEP ENERGY COMPANY**  
**RW #23-23B PAD**  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 23, T7S, R23E, S.L.B.&M.

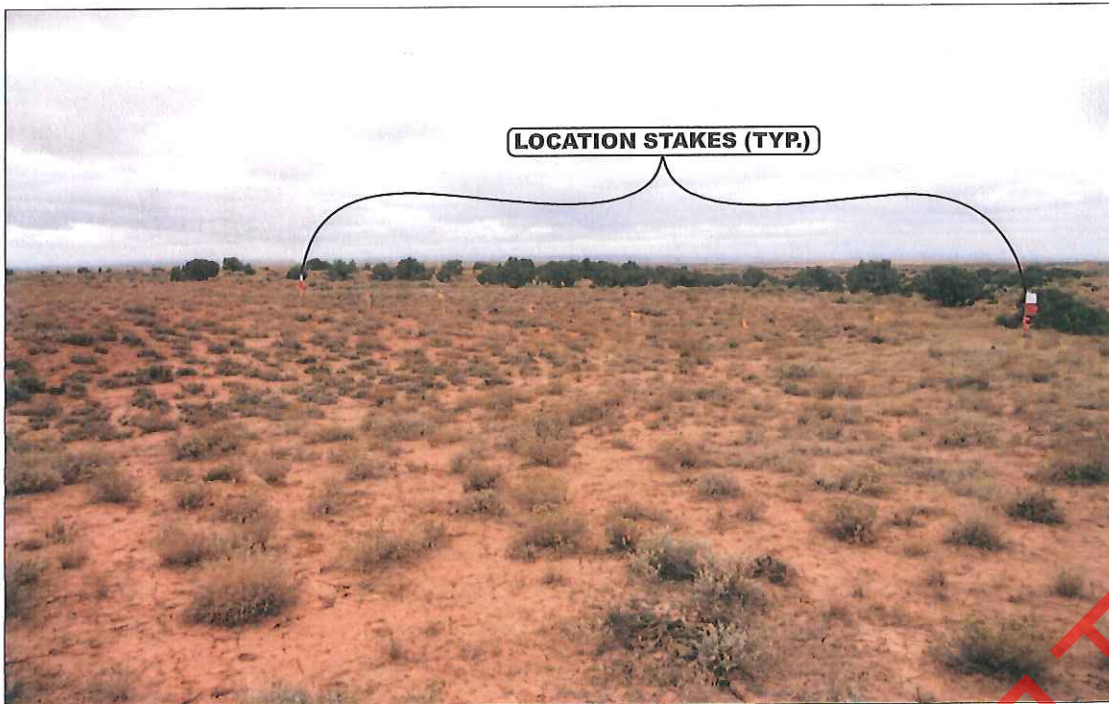


PHOTO: VIEW OF LOCATION STAKES

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: SOUTHERLY



- Since 1964 -

**UELS**

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**LOCATION PHOTOS**

**10 05 11**  
MONTH DAY YEAR

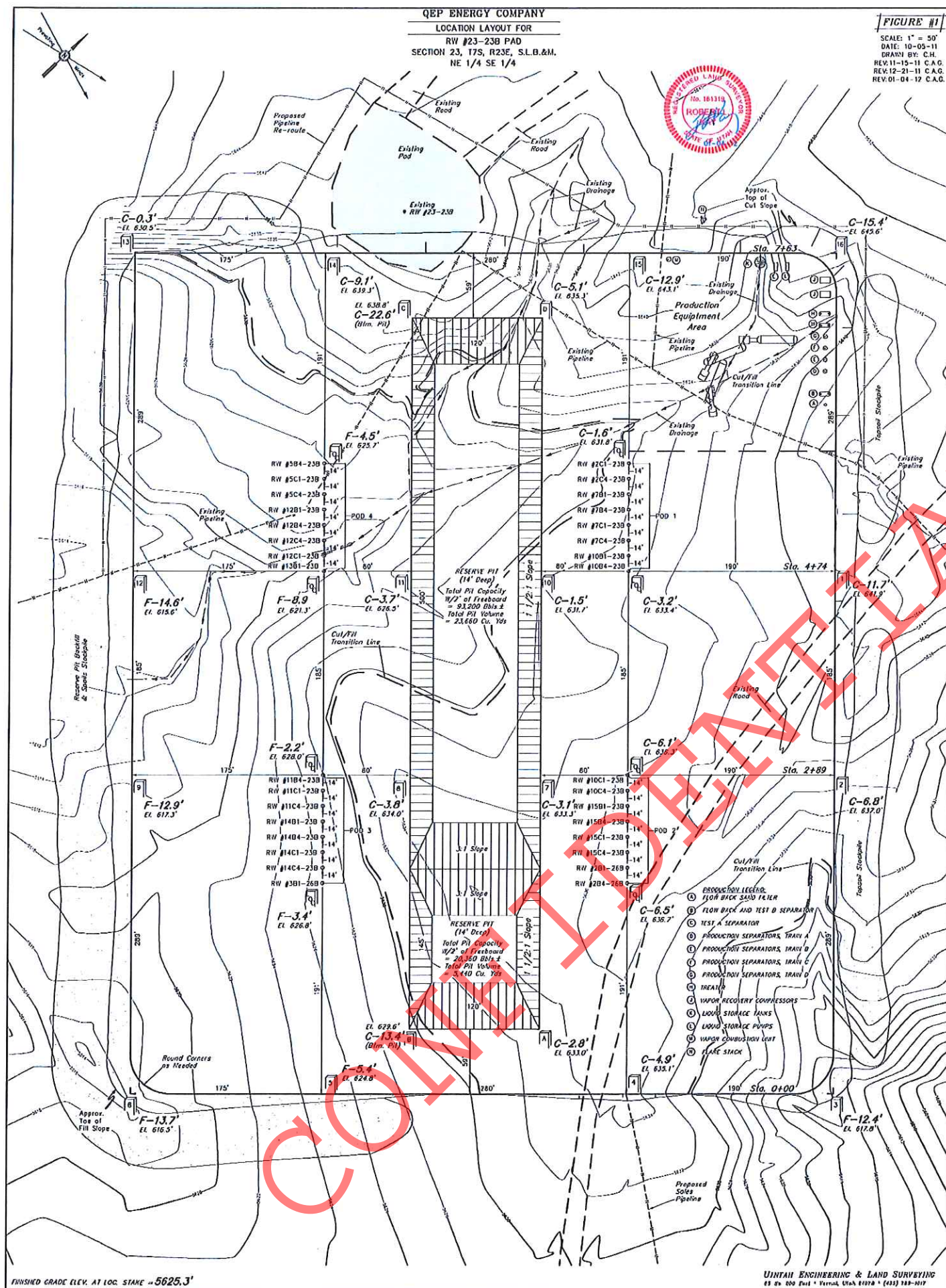
**PHOTO**

TAKEN BY: A.F.

DRAWN BY: A.W.

REVISED: 00-00-00

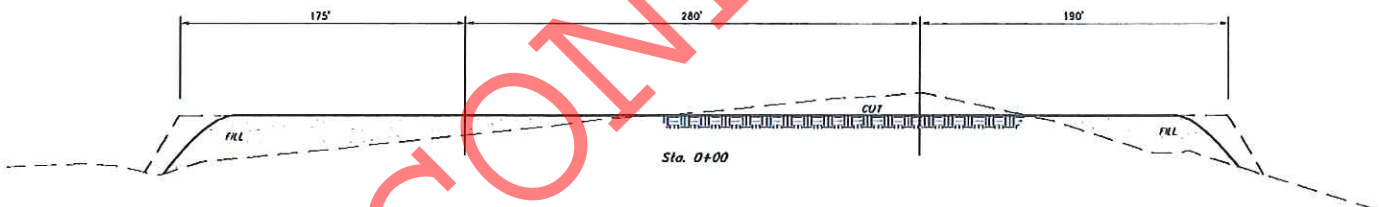
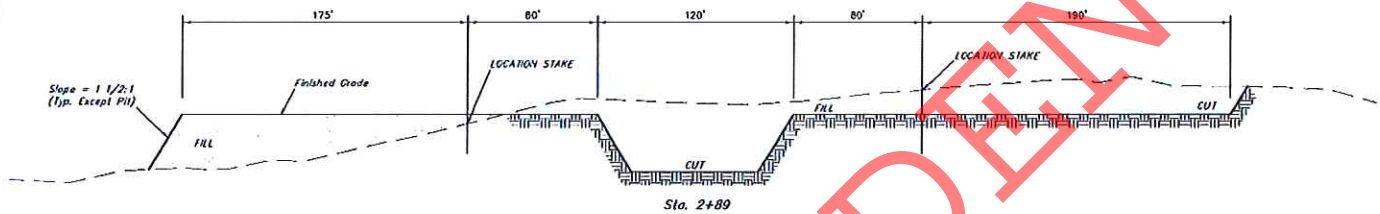
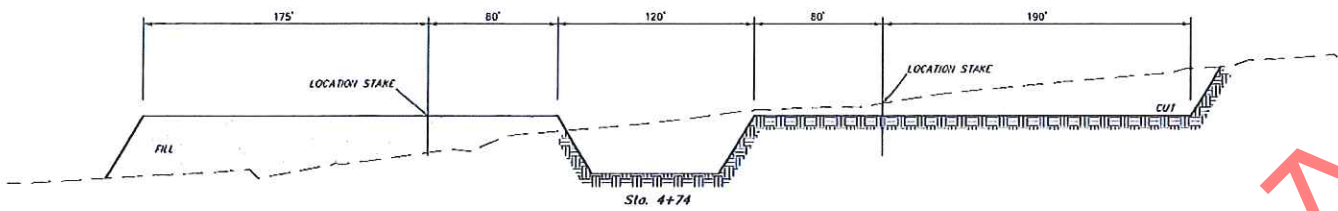
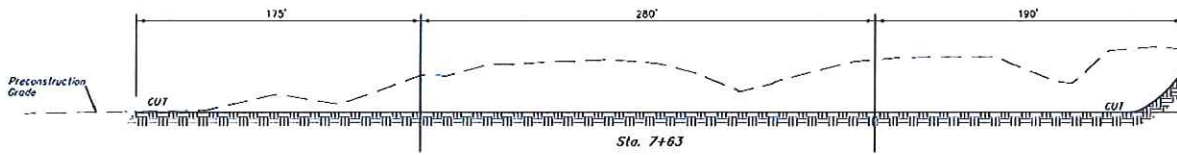




QEP ENERGY COMPANY  
TYPICAL CROSS SECTIONS FOR  
RW #23-23B PAD  
SECTION 23, T7S, R23E, S.L.B.&M.  
NE 1/4 SE 1/4

FIGURE #2

X-Section  
Scale  
1" = 50'  
DATE: 10-05-11  
DRAWN BY: C.H.



\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

## APPROXIMATE YARDAGES

(6") Topsoil Stripping = 10,080 Cu. Yds.  
Remaining Location = 76,330 Cu. Yds.  
TOTAL CUT = 86,410 CU.YDS.  
FILL = 59,800 CU.YDS.

EXCESS MATERIAL = 26,610 Cu. Yds.  
Topsoil & Pili Backfill = 24,630 Cu. Yds.  
(1/2 Pili Vol)  
EXCESS UNBALANCE = 4,880 Cu. Yds.  
(After Interim Rehabilitation)

## APPROXIMATE ACRES

WELL SITE DISTURBANCE = 3.14189 ACRES  
TOTAL = 3.14189 ACRES

UNTAIN ENGINEERING & LAND SURVEYING  
612 N. 200 East • P.O. Box 84078 • (413) 181-1017





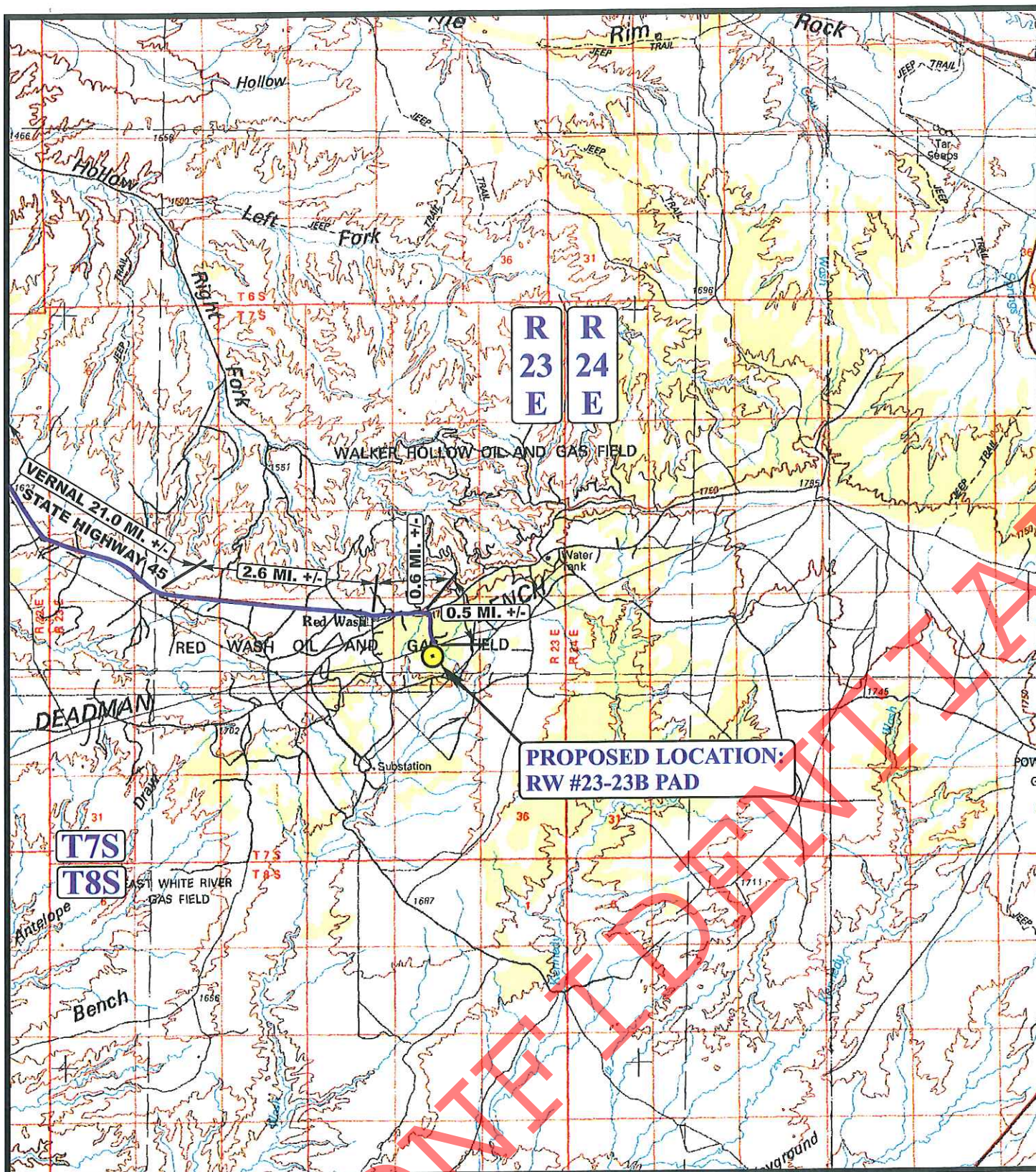
QEP ENERGY COMPANY  
RW #23-23B PAD  
SECTION 23, T7S, R23E, S.L.B.&M.

PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND STATE HIGHWAY 45 TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 2.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED LOCATION IS APPROXIMATELY 24.7 MILES.

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**LEGEND:**

PROPOSED LOCATION

**QEP ENERGY COMPANY**

**RW #23-23B PAD**  
**SECTION 23, T7S, R23E, S.L.B.&M.**  
**NE 1/4 SW 1/4**



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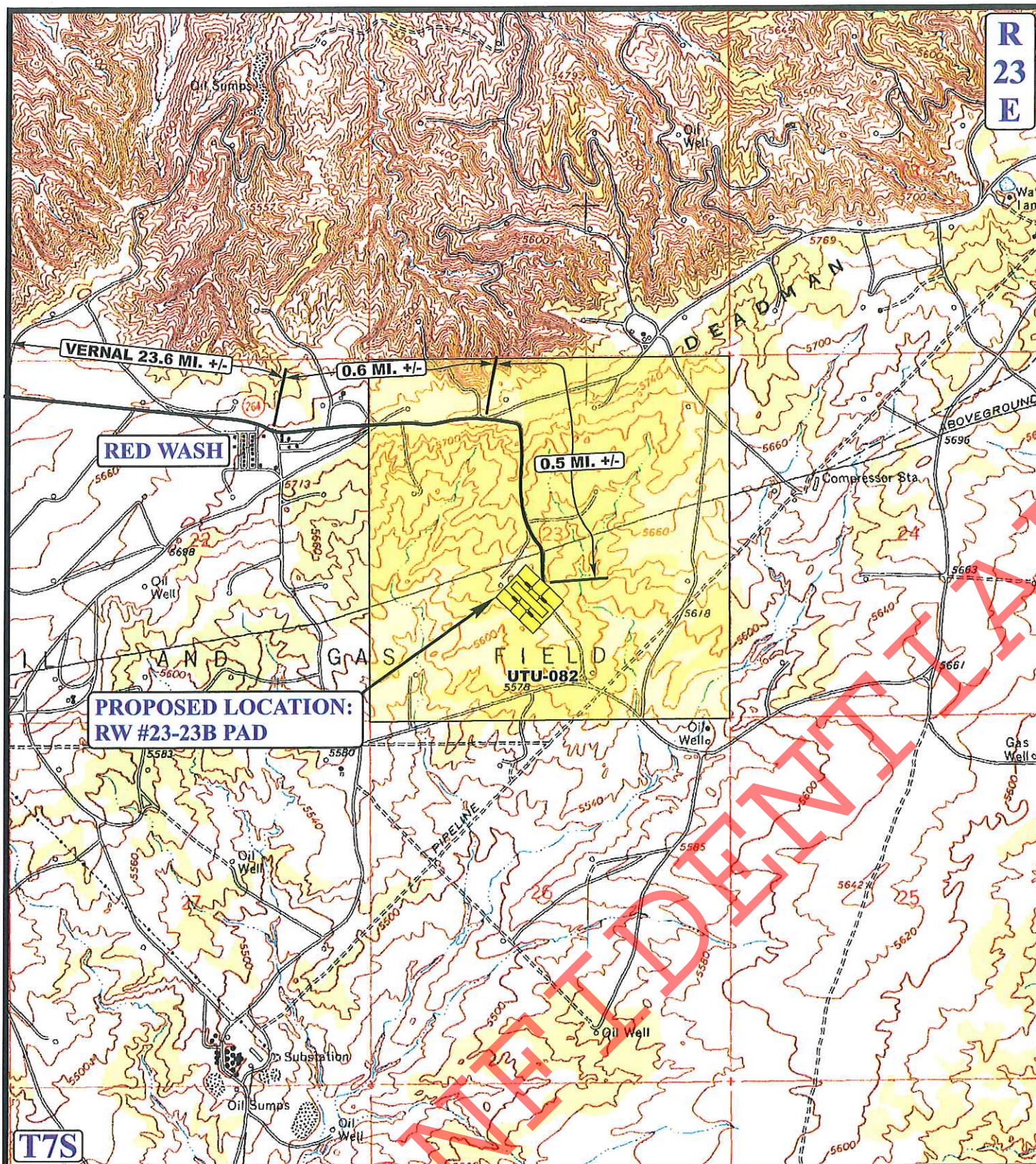
**ACCESS ROAD**  
**MAP**

**10 05 11**  
 MONTH DAY YEAR



SCALE: 1:100,000 DRAWN BY: A.W. REVISED: 00-00-00



**LEGEND:**

EXISTING ROAD

**QEP ENERGY COMPANY**

**RW #23-23B PAD**  
**SECTION 23, T7S, R23E, S.L.B.&M.**  
**NE 1/4 SW 1/4**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

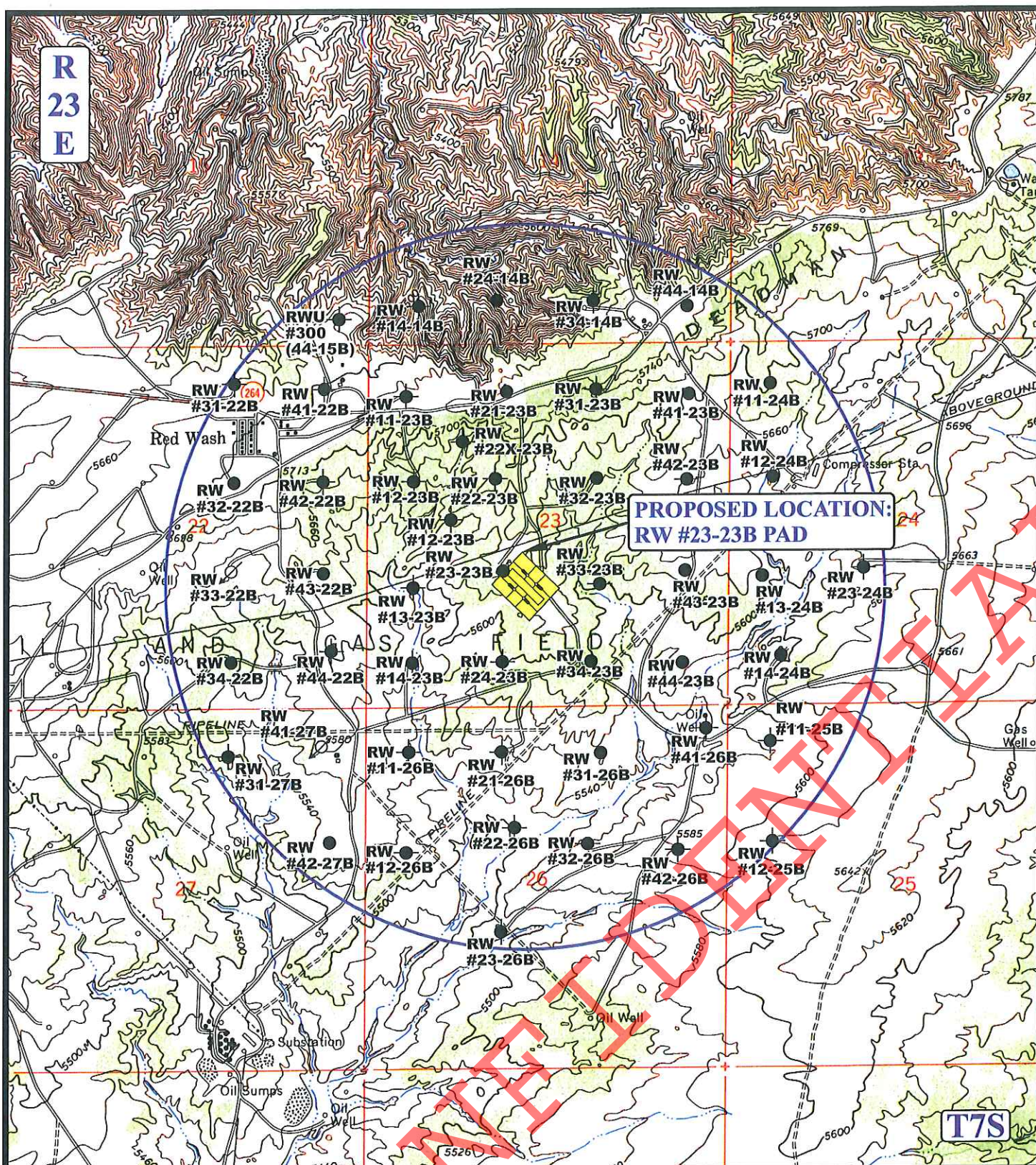
**ACCESS ROAD**  
**MAP**

**10 05 11**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: A.W. REVISED: 00-00-00

**B**  
**TOPO**



**LEGEND:**

- |                   |                         |
|-------------------|-------------------------|
| ○ DISPOSAL WELLS  | ○ WATER WELLS           |
| ● PRODUCING WELLS | ● ABANDONED WELLS       |
| ● SHUT IN WELLS   | ● TEMPORARILY ABANDONED |

**QEP ENERGY COMPANY**

**RW #23-23B PAD**  
**SECTION 23, T7S, R23E, S.L.B.&M.**  
**NE 1/4 SW 1/4**



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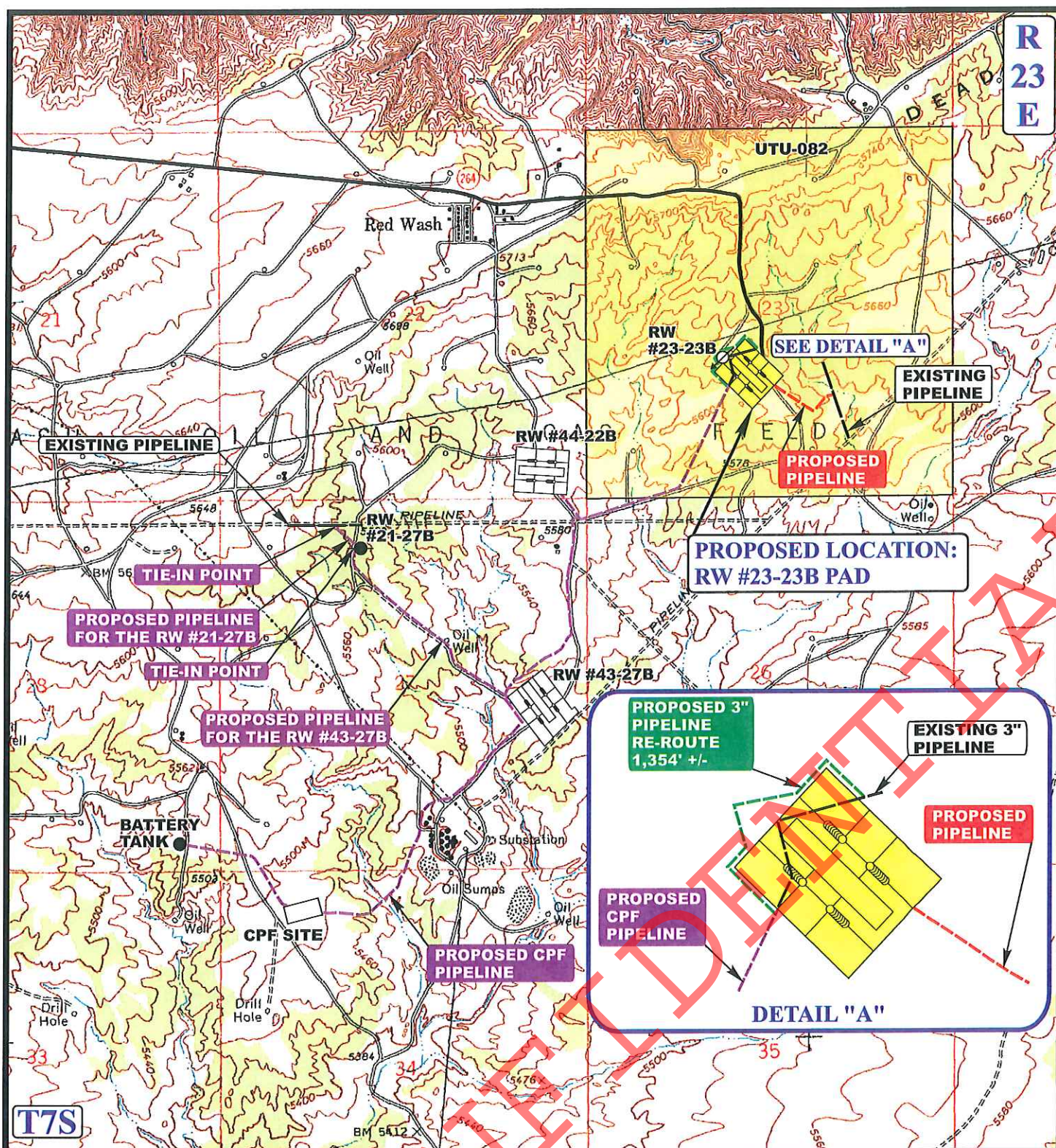
**TOPOGRAPHIC**  
**MAP**

**10 05 11**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: A.W. REVISED: 00-00-00

**C**  
**TOPO**









## **QEP ENERGY (UT)**

**Red Wash  
23-23B PAD  
RW 5C1-23B**

**Original Hole**

**Plan: Plan ver.1 - Permit**

## **Standard Planning Report**

**10 January, 2012**

CONFIDENTIAL





**QEP Resources, Inc.**  
Planning Report



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5641.30usft (Est RKB)
<b>Project:</b>	Red Wash	<b>MD Reference:</b>	RKB @ 5641.30usft (Est RKB)
<b>Site:</b>	23-23B PAD	<b>North Reference:</b>	True
<b>Well:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.1 - Permit		

Project	Red Wash		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		Using geodetic scale factor

Site	23-23B PAD				
Site Position:		Northing:	7,246,686.310 usft	Latitude:	40.193199
From:	Map	Easting:	2,256,158.369 usft	Longitude:	-109.295575
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.41

Well	RW 5C1-23B					
Well Position	+N/-S	-211.97 usft	Northing:	7,246,469.906 usft	Latitude:	40.192617
	+E/-W	-183.38 usft	Easting:	2,255,980.282 usft	Longitude:	-109.296231
Position Uncertainty		0.00 usft	Wellhead Elevation:	5,625.30 usft	Ground Level:	5,625.30 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/7/2011	10.96	66.05	52,408

Design	Plan ver.1 - Permit			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	307.81

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,519.97	20.40	307.81	1,498.56	110.15	-141.94	2.00	2.00	0.00	307.81	
6,715.86	20.40	307.81	6,368.59	1,220.53	-1,572.71	0.00	0.00	0.00	0.00	
8,075.82	0.00	0.00	7,700.00	1,367.39	-1,761.96	1.50	-1.50	0.00	180.00	
11,510.82	0.00	0.00	11,135.00	1,367.39	-1,761.96	0.00	0.00	0.00	0.00	



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5641.30usft (Est RKB)
<b>Project:</b>	Red Wash	<b>MD Reference:</b>	RKB @ 5641.30usft (Est RKB)
<b>Site:</b>	23-23B PAD	<b>North Reference:</b>	True
<b>Well:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.1 - Permit		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,519.97	20.40	307.81	1,498.56	110.15	-141.94	179.66	2.00	2.00	0.00
6,715.86	20.40	307.81	6,368.59	1,220.53	-1,572.71	1,990.75	0.00	0.00	0.00
8,075.82	0.00	0.00	7,700.00	1,367.39	-1,761.96	2,230.30	1.50	-1.50	0.00
11,510.82	0.00	0.00	11,135.00	1,367.39	-1,761.96	2,230.30	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
RW 5C1-23B Target	0.00	0.00	8,310.00	1,367.39	-1,761.96	7,247,793.370	2,254,185.320	40.196370	-109.302539
- plan misses target center by 610.00usft at 8075.82usft MD (7700.00 TVD, 1367.39 N, -1761.96 E)									
- Circle (radius 150.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
3,838.84	3,672.00	8 5/8"	8-5/8	12-1/4	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,984.24	2,871.00	Green River		0.00	
3,785.49	3,622.00	Mahogany		0.00	
5,806.22	5,516.00	Est. Moderately Saline Water Base		0.00	
6,446.37	6,116.00	Wasatch		0.00	
8,687.82	8,312.00	Mesaverde		0.00	
11,210.82	10,835.00	Sego		0.00	



# Company Name: QEP ENERGY (UT)



Azimuths to True North  
 Magnetic North: 10.95°  
 Magnetic Field  
 Strength: 50408.4nT  
 Dip Angle: 66.05°  
 Date: 12/7/2011  
 Model: IGRF2010

Project: Red Wash  
 Site: 23-23B PAD  
 Well: RW 5C1-23B  
 Wellbore: Original Hole  
 Design: Plan ver.1 - Permit

## WELL DETAILS: RW 5C1-23B

Ground Level: 5625.30  
 +N/-S 0.00 +E/-W 0.00 Northing 7246469.906 Easting 2255980.282 Latitude 40.192617 Longitude -109.296231 Slot

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well RW 5C1-23B, True North  
 Vertical (TVD) Reference: RKB @ 5641.30usft (Est RKB)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: RKB @ 5641.30usft (Est RKB)  
 Calculation Method: Minimum Curvature

## PROJECT DETAILS: Red Wash

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Central Zone  
 System Datum: Mean Sea Level

## DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
RW 5C1-23B Target	8310.00	1367.39	-1761.96	7247793.370	2254185.320	Circle (Radius: 150.00)

## SECTION DETAILS

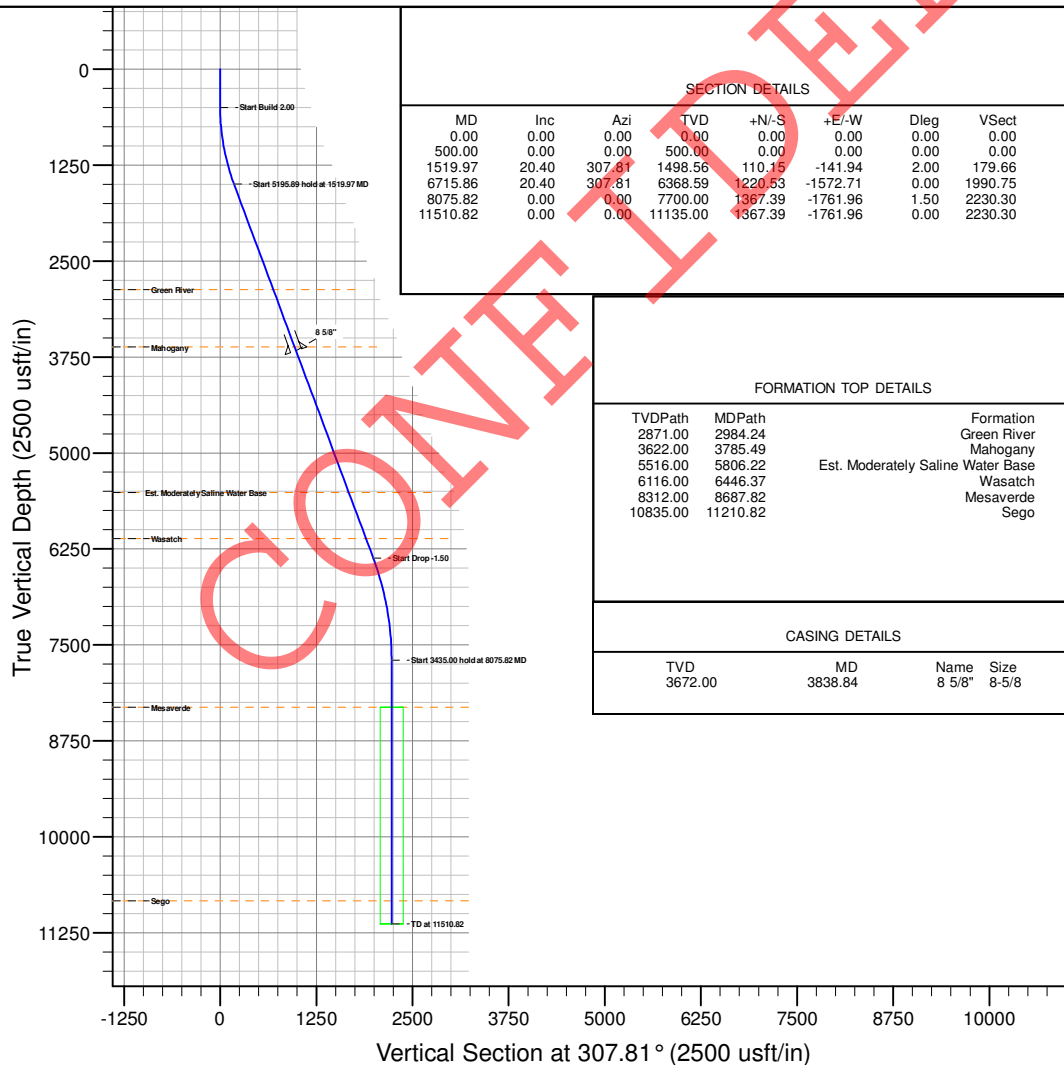
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00
1519.97	20.40	307.81	1498.56	110.15	-141.94	2.00	179.66
6715.86	20.40	307.81	6368.59	1220.53	-1572.71	0.00	1990.75
8075.82	0.00	0.00	7700.00	1367.39	-1761.96	1.50	2230.30
11510.82	0.00	0.00	11135.00	1367.39	-1761.96	0.00	2230.30

## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2871.00	2984.24	Green River
3622.00	3785.49	Mahogany
5516.00	5806.22	Est. Moderately Saline Water Base
6116.00	6446.37	Wasatch
8312.00	8687.82	Mesaverde
10835.00	11210.82	Sego

## CASING DETAILS

TVD	MD	Name	Size
3672.00	3838.84	8 5/8"	8-5/8



RECEIVED: January 30, 2012

**QEP ENERGY COMPANY  
RED WASH 23-23B PAD EXPANSION**

**ONSHORE ORDER NO. 1  
MULTI – POINT SURFACE USE & OPERATIONS PLAN**

**RW 7C1-23B**

Surface:	1932' FSL, 2330' FWL	SEC.23	NESW, T7S, R23E
BHL:	2167' FNL, 2294' FEL	SEC.23	SWNE, T7S, R23E

**RW 2C1-23B**

Surface:	1971' FSL, 2289' FWL	SEC.23	NESW, T7S, R23E
BHL:	850' FNL, 2290' FEL	SEC.23	NWNE, T7S, R23E

**RW 2C4-23B**

Surface:	1961' FSL, 2299' FWL	SEC.23	NESW, T7S, R23E
BHL:	1176' FNL, 2290' FEL	SEC.23	NWNE, T7S, R23E

**RW 7B1-23B**

Surface:	1951' FSL, 2309' FWL	SEC.23	NESW, T7S, R23E
BHL:	1506' FNL, 2291' FEL	SEC.23	SWNE, T7S, R23E

**RW 7B4-23B**

Surface:	1942' FSL, 2319' FWL	SEC.23	NESW, T7S, R23E
BHL:	1836' FNL, 2292' FEL	SEC.23	SWNE, T7S, R23E

**RW 7C4-23B**

Surface:	1922' FSL, 2340' FWL	SEC.23	NESW, T7S, R23E
BHL:	2495' FNL, 2293' FEL	SEC.23	SENE, T7S, R23E

**RW 10B1-23B**

Surface:	1913' FSL, 2350' FWL	SEC.23	NESW, T7S, R23E
BHL:	2454' FSL, 2292' FEL	SEC.23	NWSE, T7S, R23E

**RW 10B4-23B**

Surface:	1903' FSL, 2360' FWL	SEC.23	NESW, T7S, R23E
BHL:	2123' FSL, 2291' FEL	SEC.23	NWSE, T7S, R23E

**RW 10C1-23B**

Surface:	1775' FSL, 2494' FWL	SEC.23	NESW, T7S, R23E
BHL:	1793' FSL, 2293' FEL	SEC.23	NWSE, T7S, R23E

**RW 10C4-23B**

Surface:	1765' FSL, 2504' FWL	SEC.23	NESW, T7S, R23E
BHL:	1461' FSL, 2292' FEL	SEC.23	NWSE, T7S, R23E

**RW 15B1-23B**

Surface:	1756' FSL, 2514' FWL	SEC.23	NESW, T7S, R23E
BHL:	1133' FSL, 2290' FEL	SEC.23	SWSE, T7S, R23E

**RW 15B4-23B**

Surface:	1746' FSL, 2524' FWL	SEC.23	NESW, T7S, R23E
BHL:	804' FSL, 2295' FEL	SEC.23	SWSE, T7S, R23E

**RW 15C1-23B**

Surface:	1736' FSL, 2534' FWL	SEC.23	NESW, T7S, R23E
BHL:	476' FSL, 2295' FEL	SEC.23	SWSE, T7S, R23E

**RW 15C4-23B**

Surface:	1727' FSL, 2544' FWL	SEC. 23	NESW, T7S, R23E
BHL:	144' FSL, 2292' FEL	SEC.23	SWSE, T7S, R23E

**RW 2B1-26B**

Surface:	1717' FSL, 2554' FWL	SEC.23	NESW, T7S, R23E
BHL:	186' FNL, 2292' FEL	SEC.26	NWNE, T7S, R23E

**RW 2B4-26B**

Surface:	1707' FSL, 2564' FWL	SEC.23	NESW, T7S, R23E
BHL:	516' FNL, 2292' FEL	SEC.26	NWNE, T7S, R23E

**RW 5B4-23B**

Surface:	1768' FSL, 2096' FWL	SEC.23	NESW, T7S, R23E
BHL:	1829' FNL, 342' FWL	SEC.23	SWNW, T7S, R23E

**RW 5C1-23B**

Surface:	1759' FSL, 2106' FWL	SEC.23	NESW, T7S, R23E
BHL:	2153' FNL, 343' FWL	SEC.23	SWNW, T7S, R23E

**RW 5C4-23B**

Surface:	1749' FSL, 2116' FWL	SEC.23	NESW, T7S, R23E
BHL:	2483' FNL, 341' FWL	SEC.23	SWNW, T7S, R23E

**RW 12B1-23B**

Surface:	1739' FSL, 2126' FWL	SEC.23	NESW, T7S, R23E
BHL:	2469' FSL, 342' FWL	SEC.23	NWSW, T7S, R23E

**RW 12B4-23B**

Surface:	1730' FSL, 2136' FWL	SEC.23	NESW, T7S, R23E
BHL:	2132' FSL, 340' FWL	SEC.23	NWSW, T7S, R23E

**RW 12C4-23B**

Surface:	1720' FSL, 2146' FWL	SEC.23	NESW, T7S, R23E
BHL:	1472' FSL, 342' FWL	SEC.23	NWSW, T7S, R23E

**RW 12C1-23B**

Surface:	1710' FSL, 2156' FWL	SEC.23	NESW, T7S, R23E
BHL:	1800' FSL, 343' FWL	SEC.23	NWSW, T7S, R23E

**RW 13B1-23B**

Surface:	1701' FSL, 2166' FWL	SEC.23	NESW, T7S, R23E
BHL:	1150' FSL, 342' FWL	SEC.23	SWSW, T7S, R23E

**RW 11B4-23B**

Surface:	1573' FSL, 2300' FWL	SEC.23	NESW, T7S, R23E
BHL:	2127' FSL, 1664' FWL	SEC.23	NESW, T7S, R23E

**RW 11C1-23B**

Surface:	1563' FSL, 2310' FWL	SEC.23	NESW, T7S, R23E
BHL:	1796' FSL, 1663' FWL	SEC.23	NESW, T7S, R23E

**RW 11C4-23B**

Surface:	1553' FSL, 2320' FWL	SEC.23	NESW, T7S, R23E
BHL:	1464' FSL, 1663' FWL	SEC.23	NESW, T7S, R23E

**RW 14B1-23B**

Surface:	1544' FSL, 2330' FWL	SEC.23	NESW, T7S, R23E
BHL:	1142' FSL, 1662' FWL	SEC.23	SESW, T7S, R23E

**RW 14B4-23B**

Surface:	1534' FSL, 2341' FWL	SEC.23	NESW, T7S, R23E
BHL:	806' FSL, 1660' FWL	SEC.23	SESW, T7S, R23E

**RW 14C1-23B**

Surface:	1524' FSL, 2351' FWL	SEC.23	NESW, T7S, R23E
BHL:	480' FSL, 1661' FWL	SEC.23	SESW, T7S, R23E

**RW 14C4-23B**

Surface:	1515' FSL, 2361' FWL	SEC.23	NESW, T7S, R23E
BHL:	149' FSL, 1662' FWL	SEC.23	SESW, T7S, R23E

**RW 3B1-26B**

Surface:	1505' FSL, 2371' FWL	SEC.23	NESW, T7S, R23E
BHL:	182' FNL, 1661' FWL	SEC.26	NENW, T7S, R23E

This surface use and operations plan provides site specific information for the above referenced wells.

An onsite inspection was conducted for the RW 23-23B Pad Expansion on October 11, 2011. Weather conditions were sunny at the time of the onsite. In attendance at the inspection were the following individuals:

Kevin Sadlier	Bureau of Land Management
Holly Villa	Bureau of Land Management
Jan Nelson	QEP Energy Company
Stephanie Tomkinson	QEP Energy Company
Ryan Angus	QEP Energy Company
Valyn Davis	QEP Energy Company
Bob Haygood	QEP Energy Company
Andy Floyd	Uintah Engineering & Land Surveying

The proposed project consists of a 32 well pad with 14.198 acres of total disturbance. This equates to approximately 0.43 acres of disturbance per well.

**1. Existing Roads:**

The proposed well site is approximately 25 miles South of Vernal, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 – mile radius.

All existing roads will be maintained and kept in good repair during all phases of operation.

**2. Planned Access Roads:**

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Refer to Topo Map B for the location of the proposed access road.

No new access road is proposed. The access to be used is the existing road that parallels pod #2. The road will be re-routed on the north east side of the pad and will remain on the pad. Graveling or capping the roadbed will be performed as necessary to provide a well constructed safe road. Should conditions warrant, rock, gravel or culverts will be installed as needed.

Refer to Topo Map B for the location of the proposed access road.

**3. Location of Existing Wells Within a 1 – Mile Radius:**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

**Please refer to Figure 1 for production facility layout and location.**

The following guidelines will apply if the well is productive.

A containment dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks). These dikes will be constructed of compacted impervious subsoil; hold 110% of the capacity of the largest tank; and, be independent of the back cut. If a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required by the Environmental Protection Agency, the containment dike may be expanded to meet SPCC requirements with approval by the BLM/VFO AO. The specific APD will address additional capacity if such is needed due to environmental concerns. The use of topsoil for the construction of dikes will not be allowed.

All loading lines will be placed inside the berm surrounding the tank batteries.



All permanent (on site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a color approved by the BLM.

It was determined on the onsite by the BLM VFO AO that the facilities will be painted Covert Green.

The existing 3" pipeline that crosses the proposed location will be re-routed to the north east side of the pad for safety. The proposed pipeline re-route is 1,354' in length, containing approximately .932 acres. Please refer to Topo Map D for the location of the existing pipeline and the re-route.

Refer to Topo Map D for the location of the proposed pipeline.

All existing equipment will be moved off location before any construction begins.

The proposed surface pipeline will be constructed utilizing existing disturbed areas to minimize surface disturbance. No construction activities will be allowed outside of the proposed pipeline.

Prior to construction, the Permittee will develop a plan of installation to minimize surface disturbance. Pipe will be strung along the pipeline route with either a flatbed trailer and rubber tired backhoe or a tracked typed side boom. Where surface conditions do not allow the pipe to be strung using conventional methods, the Permittee will utilize pull sections to run the fabricated pipe through the area from central staging areas along the pipeline route.

Upon completion of stringing activities the Permittee will fabricate the pipeline on wooden skids adjacent to the centerline of the pipeline route using truck mounted welding machines. All fabricated piping will be lowered off of the wooden skids and placed along the centerline. Upon completion of all activities, the wooden skids will be removed from the pipeline route using a flatbed truck or flatbed truck and trailer.

When the surface terrain prohibits the Permittee from safely installing the pipeline along the pipeline route, grading of the route will be required. Prior to installing the pipeline in these areas a plan will be developed to safely install the pipeline while minimizing grading activities and surface disturbances. Additionally, erosion control Best Management Practices will be installed as needed prior to the start of any grading activities. Surface grading will be limited to what is needed to safely install the pipeline. Track type bulldozers and track type backhoes will be utilized for grading activities.

Upon completion of the pipeline installation, the pipeline route will be restored to the pre-disturbance surface contours.

The proposed pipeline will be a surface 10" or smaller, 1,059' in length, containing .729 acres.

### **Road Crossings**

Fusion Bond or concrete coated pipe will be used for all road crossings to alleviate future corrosion.

All pipe and fittings used for road crossings will be prefabricated within the proposed pipeline route to minimize the duration of open pipe trench across the roadway. Pipe used for road crossings will be isolated on each end with a flange set and insulation kit and cathodically protected with a magnesium type anode. Adequately sized equipment will be used for minor and major road crossings. Depth of cover for minor roads will be >4' and the depth of cover for major roads will be >6'.

Prior to lowering the pipe in the trench, the Permittee will "Jeep" the pipe to locate and repair any holidays in the pipe coating. Upon lowering the pipe in the trench, 6" of bedding and a minimum of 6" of shading will be installed to protect the pipe using either native soils <1" in diameter or imported sand. Pipe trenches that extend across gravel roads will be backfilled with native soils to within 8" of the driving surface and capped with 3/4" road base. Pipe trenches that extend across asphalt paved roads will be backfilled to 4" of the driving surface with 3/4" road base and capped asphalt material.

**5. Location and Type of Water Supply:**

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Water for drilling purposes would be obtained from Wonsits Valley Water Right # A 36125 (which was filed on May 7, 1964) or Red Wash Water Right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System.

**6. Source of Construction Materials:**

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2-3.

**7. Methods of Handling Waste Materials:**

Please refer to QEP Energy Company Greater Deadman Bench EIS UTU-080-200-0369V Record of Decision dated March 31, 2008.

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be used at the next drill site or will be removed and disposed of at an approved waste disposal facility within 6 months after drilling is terminated.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Unless specified in the site specific APD, the reserve pit will be constructed on the location and will not be located within natural drainages, where a flood hazard exists or surface runoff will or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

It will be determined at the on-site inspection if a pit liner is necessary, the reserve pit will be lined with a synthetic reinforced 30 mil liner with sufficient bedding to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place.

No trash or scrap will be disposed of in the pit.

Reserve pit leaks are considered an undesirable event and will be orally reported to the AO.

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days.

After the 90 day period, the produced water will be contained in tanks on location and then hauled by truck to one of the following pre-approved disposal sites:

Red Wash Disposal well located in the SESE, Section 28, T7S, R23E,  
West End Disposal located in the NESE, Section 28, T7S, R22E,  
NBE 12 SWD-10-9-23 located in the NWSW, Section 10, 9S, 23E.

Produced water, oil, and other byproducts will not be applied to roads or well pads for the control of dust or weeds. The dumping of produced fluids on roads, well sites, or other areas will not be allowed.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site. The spills will be reported to the AO and other authorities as appropriate.

A chemical porta-toilet will be furnished with the drilling rig. The chemical porta-toilet wastes will be hauled to Ashley Valley Sewer and Water System for disposal.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location. All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig. All trash and waste material will be hauled to the Uintah County Landfill.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of wells. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of wells within these areas. Specific APD's shall address any modifications from this policy.

**8. Ancillary Facilities:**

None anticipated.

**9. Well Site Layout: (See Location Layout Diagram)**

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram rig orientation, parking areas, and access roads, as well as the location of the following:

The reserve pit.

The stockpiled topsoil will not be used for facility berms. All brush removed from the well pad during construction will be stockpiled with topsoil.

The flare pit or flare box will be located downwind from the prevailing wind direction.

Any drainage that crosses the well location will be diverted around the location by using ditches, water diversion drains or berms. If deemed necessary at the on-site, erosion drains may be installed to contain sediments that could be produced from access roads and well locations.

A pit liner is required. A felt pit liner will be required if bedrock is encountered.

**10. Fencing Requirements:**

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched using a stretching device before it is attached to corner posts.

The reserve pit will be fenced on three (3) sides during drilling operations. The fourth side will be put in place when the rig moves off location. The pit will be fenced and maintained until it is backfilled. If drilling operations does not commence within 3 days, the fourth side of the fence will be installed

#### **11. Plans for Reclamation of the Surface:**

Please refer to QEP Energy Company Uinta Basin Division Reclamation Plan

##### **Site Specific Procedures:**

##### **Site Specific Reclamation Summary:**

Reclamation will follow QEP Energy Company, Uinta Basin Division's Reclamation Plan, September 2009 (QEP's Reclamation Plan) and the BLM Green River District Reclamation Guidelines.

After the pad is built, the topsoil piles will be seeded, signed, and erosion control devices and techniques will be implemented.

All trash and debris will be removed from the disturbed area.

After the wells are on production, the pad will be downsized to a smaller production pad.

The cuttings pit is located in the center of the production pad; it will be backfilled and capped with road base and gravel.

Interim reclamation will be conducted on the portion of the pad that is downsized.

The interim reclamation area will be recontoured to blend with the surrounding landscape. All topsoil will be evenly distributed.

Water courses and drainages will be established.

Erosion control devices and techniques will be installed where needed.

Seeding will be done in the fall, prior to ground freeze up.

The seed mix will be determined prior to seeding.

Monitoring and reporting will be conducted as stated in QEP's Reclamation Plan. A reference site and weed data sheet have been established and are included in this application.

Weed control will be conducted as stated in QEP's Reclamation Plan.

It was determined and agreed upon that there is 5" inches of top soil.

**12. Surface Ownership:**

Bureau of Land Management  
170 South 500 East  
Vernal, Utah 84078  
(435) 781-4400

**13. Other Information:**

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted on October 19, 2011, **State of Utah Antiquities Project U-11-MQ-0913b** by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

A Class III paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted on October 14, 2011 **IPC # 11-176** by Stephen D. Sandau. The inspection resulted in the location of no fossil resources. However, if vertebrate fossil(s) are found during construction a paleontologist should be immediately notified. QEP Energy Company will provide Paleo monitor if needed.

CONFIDENTIAL





**QEP Energy Company**

11002 East 17500 South  
Vernal, UT 84078  
Telephone 435-781-4331  
Fax 435-781-4395

January 26, 2012

Ms. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

RE: Directional Drilling R649-3-11  
Red Wash Unit  
**RW 5C1-23B**  
T7S-R23E  
Section 23:  
1759' FSL, 2106' FWL, NESW, (Surface)  
2153' FNL, 343' FWL, SWNW, (Bottom Hole)  
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of QEP Energy Company Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649 -3-11 pertaining to the location and drilling of a directional well.

QEP Energy Company is permitting this well at this location for geological reasons. Locating the well at the surface location and directionally drilling from this location, QEP Energy Company will be able to minimize surface disturbance.

Furthermore, QEP Energy Company certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information QEP Energy Company requests the permit be granted pursuant to Rule R649-3-11.

Sincerely,

QEP Energy Company

  
Jan Nelson  
Permit Agent

**Lessee's or Operator's Representative & Certification:**

Valyn Davis  
Regulatory Affairs Analyst  
QEP Energy Company  
11002 East 17500 South  
Vernal, UT 84078  
(435) 781-4369

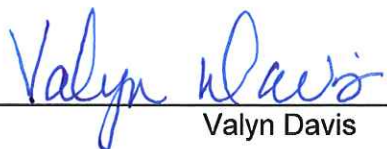
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

QEP Energy Company is considered to be the operator of the subject well.  
QEP Energy Company agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104.2 for lease activities is being provided by  
Bond No. ESB000024

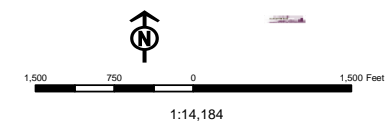
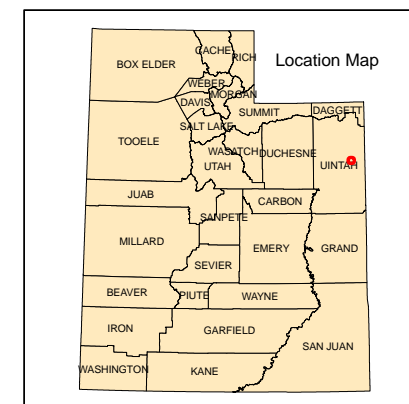
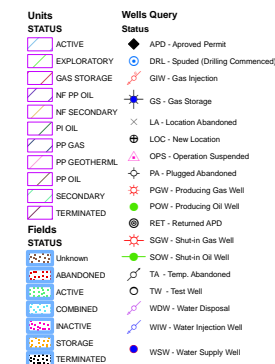
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist, that I have full knowledge of the State and Federal laws applicable to this operations; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
Valyn Davis

1/27/2012  
\_\_\_\_\_  
Date



Map Produced by Diana Mason



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

February 7, 2012

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2012 Plan of Development Red Wash Unit,  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Red Wash Unit, Uintah County, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ MESA VERDE)		
43-047-52303	RW 2C1-23B	Sec 23 T07S R23E 1971 FSL 2289 FWL
	BHL	Sec 23 T07S R23E 0850 FNL 2290 FEL
43-047-52304	RW 2C4-23B	Sec 23 T07S R23E 1961 FSL 2299 FWL
	BHL	Sec 23 T07S R23E 1176 FNL 2290 FEL
43-047-52305	RW 7B1-23B	Sec 23 T07S R23E 1951 FSL 2309 FWL
	BHL	Sec 23 T07S R23E 1506 FNL 2291 FEL
43-047-52306	RW 7B4-23B	Sec 23 T07S R23E 1942 FSL 2319 FWL
	BHL	Sec 23 T07S R23E 1836 FNL 2292 FEL
43-047-52307	RW 7C1-23B	Sec 23 T07S R23E 1932 FSL 2330 FWL
	BHL	Sec 23 T07S R23E 2167 FNL 2294 FEL
43-047-52308	RW 14C1-23B	Sec 23 T07S R23E 1524 FSL 2351 FWL
	BHL	Sec 23 T07S R23E 0480 FSL 1661 FWL
43-047-52309	RW 10B1-23B	Sec 23 T07S R23E 1913 FSL 2350 FWL
	BHL	Sec 23 T07S R23E 2454 FSL 2292 FEL
43-047-52310	RW 14B4-23B	Sec 23 T07S R23E 1534 FSL 2341 FWL
	BHL	Sec 23 T07S R23E 0806 FSL 1660 FWL
43-047-52311	RW 5B4-23B	Sec 23 T07S R23E 1768 FSL 2096 FWL
	BHL	Sec 23 T07S R23E 1829 FNL 0342 FWL

RECEIVED: February 14, 2012



(Proposed PZ MESA VERDE)

API#	WELL NAME	LOCATION
43-047-52312	RW 5C1-23B	Sec 23 T07S R23E 1759 FSL 2106 FWL
	BHL	Sec 23 T07S R23E 2153 FNL 0343 FWL
43-047-52313	RW 2B4-26B	Sec 23 T07S R23E 1707 FSL 2564 FWL
	BHL	Sec 26 T07S R23E 0516 FNL 2292 FEL
43-047-52314	RW 15C4-23B	Sec 23 T07S R23E 1727 FSL 2544 FWL
	BHL	Sec 23 T07S R23E 0144 FSL 2292 FEL
43-047-52315	RW 15B1-23B	Sec 23 T07S R23E 1756 FSL 2514 FWL
	BHL	Sec 23 T07S R23E 1133 FSL 2290 FEL
43-047-52316	RW 15C1-23B	Sec 23 T07S R23E 1736 FSL 2534 FWL
	BHL	Sec 23 T07S R23E 0476 FSL 2295 FEL
43-047-52317	RW 10C4-23B	Sec 23 T07S R23E 1765 FSL 2504 FWL
	BHL	Sec 23 T07S R23E 1461 FSL 2292 FEL
43-047-52318	RW 14B1-23B	Sec 23 T07S R23E 1544 FSL 2330 FWL
	BHL	Sec 23 T07S R23E 1142 FSL 1662 FWL
43-047-52319	RW 15B4-23B	Sec 23 T07S R23E 1746 FSL 2524 FWL
	BHL	Sec 23 T07S R23E 0804 FSL 2295 FEL
43-047-52320	RW 10C1-23B	Sec 23 T07S R23E 1775 FSL 2494 FWL
	BHL	Sec 23 T07S R23E 1793 FSL 2293 FEL
43-047-52321	RW 11C4-23B	Sec 23 T07S R23E 1553 FSL 2320 FWL
	BHL	Sec 23 T07S R23E 1464 FSL 1663 FWL
43-047-52322	RW 10B4-23B	Sec 23 T07S R23E 1903 FSL 2360 FWL
	BHL	Sec 23 T07S R23E 2123 FSL 2291 FEL
43-047-52323	RW 7C4-23B	Sec 23 T07S R23E 1922 FSL 2340 FWL
	BHL	Sec 23 T07S R23E 2495 FNL 2293 FEL
43-047-52324	RW 2B1-26B	Sec 23 T07S R23E 1717 FSL 2554 FWL
	BHL	Sec 26 T07S R23E 0186 FNL 2292 FEL
43-047-52325	RW 3B1-26B	Sec 23 T07S R23E 1505 FSL 2371 FWL
	BHL	Sec 26 T07S R23E 0182 FNL 1661 FWL
43-047-52326	RW 11C1-23B	Sec 23 T07S R23E 1563 FSL 2310 FWL
	BHL	Sec 23 T07S R23E 1796 FSL 1663 FWL
43-047-52327	RW 5C4-23B	Sec 23 T07S R23E 1749 FSL 2116 FWL
	BHL	Sec 23 T07S R23E 2483 FNL 0341 FWL
43-047-52328	RW 12B1-23B	Sec 23 T07S R23E 1739 FSL 2126 FWL
	BHL	Sec 23 T07S R23E 2469 FSL 0342 FWL
43-047-52329	RW 12C4-23B	Sec 23 T07S R23E 1720 FSL 2146 FWL
	BHL	Sec 23 T07S R23E 1472 FSL 0342 FWL

API#	WELL NAME	LOCATION
(Proposed PZ MESA VERDE)		
43-047-52330	RW 12C1-23B	Sec 23 T07S R23E 1710 FSL 2156 FWL
	BHL	Sec 23 T07S R23E 1800 FSL 0343 FWL
43-047-52331	RW 14C4-23B	Sec 23 T07S R23E 1515 FSL 2361 FWL
	BHL	Sec 23 T07S R23E 0149 FSL 1662 FWL
43-047-52332	RW 12B4-23B	Sec 23 T07S R23E 1730 FSL 2136 FWL
	BHL	Sec 23 T07S R23E 2132 FSL 0340 FWL
43-047-52333	RW 13B1-23B	Sec 23 T07S R23E 1701 FSL 2166 FWL
	BHL	Sec 23 T07S R23E 1150 FSL 0342 FWL
43-047-52334	RW 11B4-23B	Sec 23 T07S R23E 1573 FSL 2300 FWL
	BHL	Sec 23 T07S R23E 2127 FSL 1664 FWL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,  
ou=Branch of Minerals, email=Michael.Coulthard@blm.gov, c=US  
Date: 2012.02.07 07:25:50 -0700

bcc: File - Red Wash Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:2-7-12

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 1/30/2012

API NO. ASSIGNED: 43047523120000

WELL NAME: RW 5C1-23B

OPERATOR: QEP ENERGY COMPANY (N3700)

PHONE NUMBER: 435 781-4369

CONTACT: Valyn Davis

PROPOSED LOCATION: NESW 23 070S 230E

Permit Tech Review: ☒

SURFACE: 1759 FSL 2106 FWL

Engineering Review: ☐

BOTTOM: 2153 FNL 0343 FWL

Geology Review: ☒

COUNTY: UINTAH

LATITUDE: 40.19261

LONGITUDE: -109.29614

UTM SURF EASTINGS: 645035.00

NORTHINGS: 4450527.00

FIELD NAME: RED WASH

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU082

PROPOSED PRODUCING FORMATION(S): MESA VERDE

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: FEDERAL - ESB000024☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: A-36125/ 49-2153☐ RDCC Review:☐ Fee Surface Agreement☐ Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

☐ R649-2-3.

Unit: RED WASH

☐ R649-3-2. General☐ R649-3-3. Exception☒ Drilling Unit

Board Cause No: Cause 187-07

Effective Date: 9/18/2001

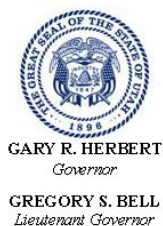
Siting: Suspends General Siting

☒ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason  
15 - Directional - dmason

RECEIVED: February 14, 2012



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** RW 5C1-23B

**API Well Number:** 43047523120000

**Lease Number:** UTU082

**Surface Owner:** FEDERAL

**Approval Date:** 2/14/2012

**Issued to:**

QEP ENERGY COMPANY, 11002 East 17500 South, Vernal, Ut 84078

**Authority:**

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 187-07. The expected producing formation or pool is the MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas



API Well No: 43047523120000

website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

RECEIVED

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

JAN 28 2012

BLM VERNAL, UTAH

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU082
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator QEP ENERGY COMPANY		7. If Unit or CA Agreement, Name and No. 892000761X
3a. Address 11002 SOUTH 17500 EAST VERNAL, UT 84078	3b. Phone No. (include area code) (435) 781-4369	8. Lease Name and Well No. RW 5C1-23B
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESW, 1759' FSL, 2106' FWL, 40.192617 N LAT., 109.296231 W LON. At proposed prod. zone SWNW, 2153' FNL, 343' FWL, 40.196369 N LAT., 109.302539 W LON.		9. API Well No. 43-047-52312
14. Distance in miles and direction from nearest town or post office* 25 MILES +/- SOUTH EAST OF VERNAL, UTAH		10. Field and Pool, or Exploratory RED WASH
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 343'	16. No. of acres in lease 1280	11. Sec., T. R. M. or Blk. and Survey or Area SEC. 23, T7S, R23E, MER SLB
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 7450' FROM UNIT BOUNDARY LINE	19. Proposed Depth 11,510' MD 11,135' TVD	12. County or Parish UINTAH
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5625 GL	22. Approximate date work will start* 06/01/2012	13. State UT
23. Estimated duration 30 DAYS		

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature Valyn Davis	Name (Printed/Typed) VALYN DAVIS	Date 01/26/2012
Title REGULATORY AFFAIRS ANALYST		
Approved by (Signature) Jerry Kenczka	Name (Printed/Typed) Jerry Kenczka	Date JUN 28 2012
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)

RECEIVED

JUL 05 2012

DIV. OF OIL, GAS &amp; MINING

NOTICE OF APPROVAL  
CONDITIONS OF APPROVAL ATTACHED

CONFIDENTIAL

N05-11/11/12

UDOGM

SXS0245A9

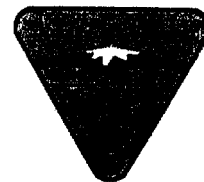


UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company:	QEP ENERGY COMPANY	Location:	NESW, Sec.23, T7S R23E
Well No:	RW 5C1-23B	Lease No:	UTU-082
API No:	43-047-52312	Agreement:	Red Wash

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm ut vn opreport@blm.gov</a>
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**Site Specific COA's**

- When feasible, two or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters (m) from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, the proponent may demonstrate compliance with the 1-hour NO<sub>2</sub> National Ambient Air Quality Standards (NAAQS) with appropriate and accepted near-field modeling. As part of this demonstration, the proponent may propose alternative mitigation that could include but is not limited to natural gas-fired drill rigs, installation of NO<sub>x</sub> controls, time/use restrictions, and/or drill rig spacing.
- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO<sub>x</sub> per horsepower-hour.
- Green completions would be used for all well completion activities where technically feasible.
- Employ enhanced VOC emission controls with 95% control efficiency on production equipment having a potential to emit greater than 5 tons per year.
- The reserve pit will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished. The reserve pits for the wells will be lined with a 16 ml liner with felt.
- A dike will be constructed around those production facilities that contain fluids. The dikes will be constructed of compacted subsoil. They will be impervious, hold 10 percent more than the capacity of the largest tank, and be independent of the back cut.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

Site Specific Drilling Plan COA's:

- Gamma ray Log shall be run from Total Depth to Surface.
- CBL will be run from TD to TOC.

Variances Granted:

Air Drilling

- Properly lubricated and maintained rotating head. Variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.
- Blooie line discharge 100' from the well bore. Variance granted for blooie line discharge to be 50' to 70' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for truck/trailer mounted air compressors located 50' from the well bore.
- In lieu of mud products on location, operator will fill a 400 bbl tank with water for the kill medium.
- Automatic igniter. Variance granted for igniter, a diffuser will be used instead. Operator will mount a deflector at the end of the blooie line to change direction and reduce the velocity of the cuttings flow to the reserve pit.
- Flare pit. Variance granted, there is no need of a flare during the drilling of the surface hole.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.



## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of

the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of

Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047523120000
<b>PHONE NUMBER:</b> 303 308-3068 Ext		<b>9. FIELD and POOL or WILDCAT:</b> RED WASH
<b>COUNTY:</b> Uintah		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 9/2/2012	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER	
	OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. ON 9/2/2012 - SET 40' OF 16" CONDUCTOR PIPE. CEMENTED WITH READY MIX.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> September 05, 2012		
<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/4/2012	

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator QEP Pete Martin Submitted By Floyd Martin  
Phone Number 435-828-0315  
Well Name/Number RW SCI-2313  
Qtr/Qtr<sup>NE</sup><sub>SW</sub> Section 23 Township 25 Range 23E  
Lease Serial Number UTU082  
API Number 43047523120000

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time September 2 2012 AM ☐ PM ☒

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED

SEP 01 2012

DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks Spud Conductor 40'-60'

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: QEP ENERGY COMPANY Operator Account Number: N 3700  
Address: 11002 EAST 17500 SOUTH  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-4369

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752314	RW 15C4-23B		NESW	23	7S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	18478	9/1/2012		9/21/2012		
Comments: WMMFD BHL: SWSE							

**CONFIDENTIAL**

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752311	RW 5B4-23B		NESW	23	7S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	18478	9/2/2012		9/21/2012		
Comments: WMMFD BHL: SWNW							

**CONFIDENTIAL**

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752312	RW 5C1-23B		NESW	23	7S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	18478	9/2/2012		9/21/2012		
Comments: WMMFD BHL: NESW							

**CONFIDENTIAL**

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

**RECEIVED**

SEP 10 2012

Div. of Oil, Gas & Mining

Valyn Davis

Name (Please Print)

Signature

Regulatory Affairs Analyst

Title

9/10/2012

Date



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047523120000
<b>9. FIELD and POOL or WILDCAT:</b> RED WASH		<b>COUNTY:</b> Uintah
<b>STATE:</b> UTAH		
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 2/28/2013	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE   <input type="checkbox"/> CHANGE TO PREVIOUS PLANS   <input type="checkbox"/> CHANGE WELL STATUS   <input type="checkbox"/> DEEPEN   <input type="checkbox"/> OPERATOR CHANGE   <input type="checkbox"/> PRODUCTION START OR RESUME   <input type="checkbox"/> REPERFORATE CURRENT FORMATION   <input type="checkbox"/> TUBING REPAIR   <input type="checkbox"/> WATER SHUTOFF   <input type="checkbox"/> WILDCAT WELL DETERMINATION         </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING   <input type="checkbox"/> CHANGE TUBING   <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS   <input type="checkbox"/> FRACTURE TREAT   <input type="checkbox"/> PLUG AND ABANDON   <input type="checkbox"/> RECLAMATION OF WELL SITE   <input type="checkbox"/> SIDETRACK TO REPAIR WELL   <input type="checkbox"/> VENT OR FLARE   <input type="checkbox"/> SI TA STATUS EXTENSION   <input type="checkbox"/> OTHER         </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR   <input type="checkbox"/> CHANGE WELL NAME   <input type="checkbox"/> CONVERT WELL TYPE   <input type="checkbox"/> NEW CONSTRUCTION   <input type="checkbox"/> PLUG BACK   <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION   <input type="checkbox"/> TEMPORARY ABANDON   <input type="checkbox"/> WATER DISPOSAL   <input type="checkbox"/> APD EXTENSION           OTHER: <input style="width: 100%;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. NO ACTIVITY ON THIS WELL DURING THE MONTH OF FEBRUARY 2013.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> March 25, 2013		
<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/25/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047523120000
<b>9. FIELD and POOL or WILDCAT:</b> RED WASH		<b>COUNTY:</b> UINTAH
<b>STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 3/31/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 NO ACTIVITY ON THIS WELL DURING THE MONTH OF MARCH 2013.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 April 02, 2013

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/1/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7.UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY	<b>9. API NUMBER:</b> 43047523120000
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078	<b>PHONE NUMBER:</b> 303 308-3068 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> RED WASH  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>4/1/2013</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

QEP ENERGY COMPANY WOULD LIKE TO OPTIMIZE THE BOTTOM HOLE SPACING OF THE MESA VERDE DEVELOPMENT. THEREFORE, QEP ENERGY COMPANY REQUESTS TO CHANGE THE BOTTOM HOLE LOCATION FOR THE ABOVE MENTIONED WELL. NEW BOTTOM HOLE FOOTAGES ARE: 2483' FNL, 341' FWL SWNW, SEC. 23, T7S, R23E LATITUDE: 40.195467, LONGITUDE: 109.302547. PLEASE SEE ATTACHED: LEGAL PLAT, DIRECTIONAL PLANS

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

**Date:** April 09, 2013

**By:** 

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/1/2013	





T7S, R23E, S.L.B.&M.

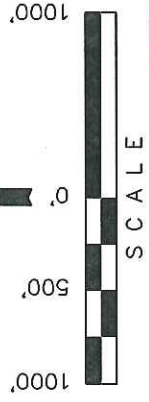
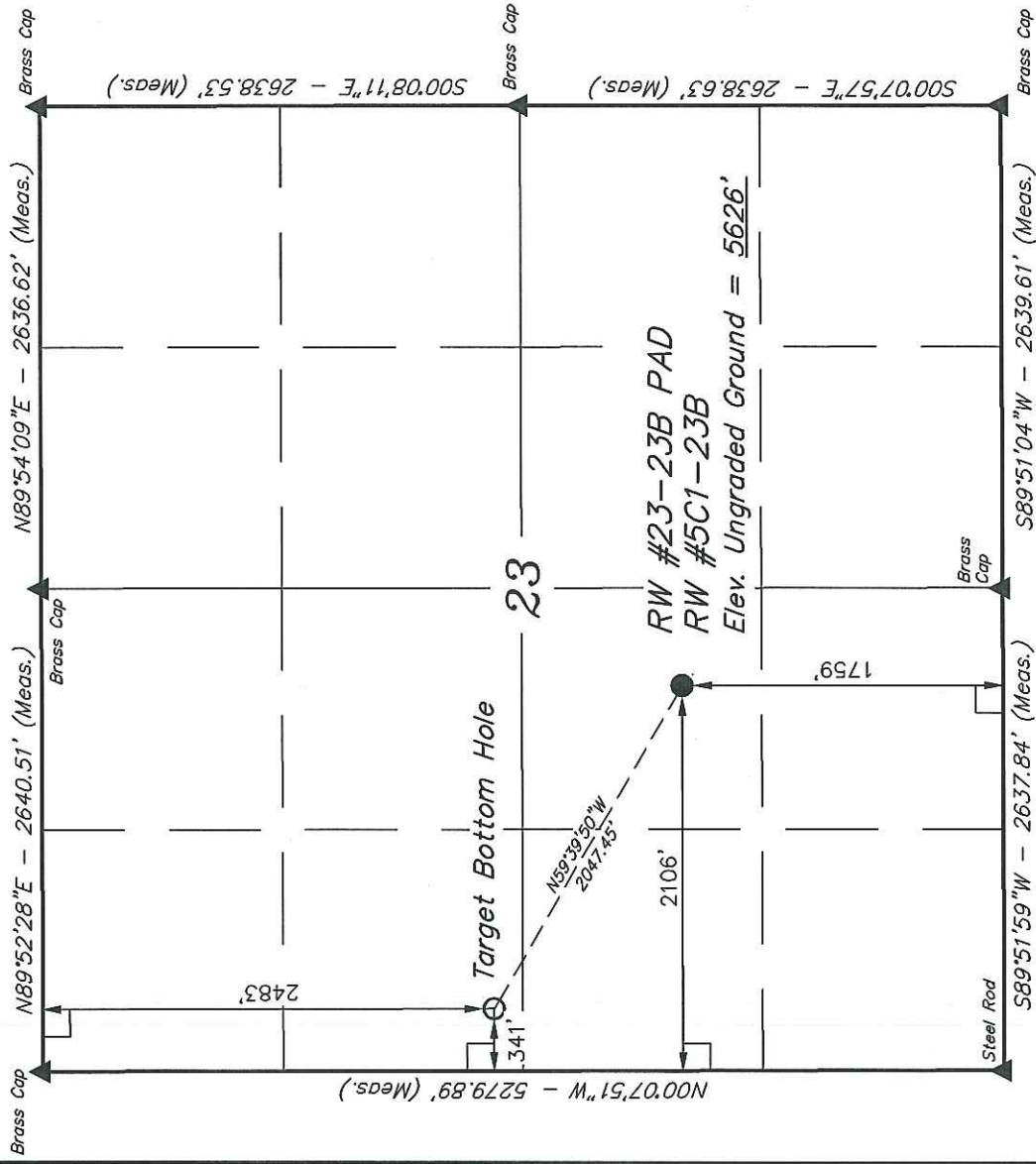
QEP ENERGY COMPANY

Well location, RW #23-23B PAD, Well Name  
RW #5C1-23B, located as shown in the NE 1/4  
SW 1/4 of Section 23, T7S, R23E, S.L.B.&M.,  
Uintah County, Utah.  
BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION  
35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE,  
QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD  
(TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES  
DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID  
ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
STATE OF UTAH  
KAY  
REGISTRATION NO. 161319  
DATE OF EXPIRATION 03-18-13

REVISED: 03-14-13  
REVISED: 01-28-13  
REVISED: 12-21-11

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

LEGEND:

- 90° SYMBOL
- PROPOSED WELL HEAD.
- SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°11'43.68" (40.195467)	LATITUDE = 40°11'33.42" (40.192617)
LONGITUDE = 109°18'09.17" (109.302547)	LONGITUDE = 109°17'46.43" (109.296231)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°11'43.80" (40.195500)	LATITUDE = 40°11'33.55" (40.192653)
LONGITUDE = 109°18'06.72" (109.301867)	LONGITUDE = 109°17'43.98" (109.295550)
STATE PLANE NAD 83 UTAH CENTRAL N: 7247463.80 E: 2254191.00	STATE PLANE NAD 83 UTAH CENTRAL N: 7246469.906 E: 2255980.282

SCALE 1" = 1000'	DATE SURVEYED: 10-03-11	DATE DRAWN: 11-15-11
PARTY A.F. C.A.G.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE	
	QEP ENERGY COMPANY	



## **QEP ENERGY (UT)**

**Red Wash  
23-23B PAD  
RW 5C1-23B**

**Original Hole**

**Plan: Plan ver.0**

## **Standard Planning Report**

**20 March, 2013**





**QEP Resources, Inc.**  
Planning Report



<b>Database:</b>	EDM_QEP	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Project:</b>	Red Wash	<b>MD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Site:</b>	23-23B PAD	<b>North Reference:</b>	True
<b>Well:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.0		

<b>Project</b>	Red Wash		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		Using geodetic scale factor

Site	23-23B PAD				
Site Position:		Northing:	7,246,686.310 usft	Latitude:	40.193199
From:	Map	Easting:	2,256,158.369 usft	Longitude:	-109.295575
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.41

Well	RW 5C1-23B,					
Well Position	+N/-S	-211.97 usft	Northing:	7,246,469.906 usft	Latitude:	40.192617
	+E/-W	-183.38 usft	Easting:	2,255,980.282 usft	Longitude:	-109.296231
Position Uncertainty		0.00 usft	Wellhead Elevation:	5,625.30 usft	Ground Level:	5,625.30 usft

<b>Wellbore</b>	Original Hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/7/2011	10.96	66.05	52,408

<b>Design</b>	Plan ver.0			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	300.46

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,559.37	17.19	300.46	1,546.54	64.86	-110.27	2.00	2.00	0.00	300.46	
7,476.34	17.19	300.46	7,199.28	951.28	-1,617.37	0.00	0.00	0.00	0.00	
8,622.17	0.00	0.00	8,328.00	1,037.76	-1,764.40	1.50	-1.50	0.00	180.00	
11,451.17	0.00	0.00	11,157.00	1,037.76	-1,764.40	0.00	0.00	0.00	0.00	



## QEP Resources, Inc.

## Planning Report



<b>Database:</b>	EDM_QEP	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Project:</b>	Red Wash	<b>MD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Site:</b>	23-23B PAD	<b>North Reference:</b>	True
<b>Well:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	2.00	300.46	799.98	0.88	-1.50	1.75	2.00	2.00	0.00
900.00	4.00	300.46	899.84	3.54	-6.02	6.98	2.00	2.00	0.00
1,000.00	6.00	300.46	999.45	7.96	-13.53	15.69	2.00	2.00	0.00
1,100.00	8.00	300.46	1,098.70	14.13	-24.03	27.88	2.00	2.00	0.00
1,200.00	10.00	300.46	1,197.47	22.06	-37.51	43.52	2.00	2.00	0.00
1,300.00	12.00	300.46	1,295.62	31.74	-53.96	62.60	2.00	2.00	0.00
1,400.00	14.00	300.46	1,393.06	43.14	-73.35	85.10	2.00	2.00	0.00
1,500.00	16.00	300.46	1,489.64	56.26	-95.66	110.98	2.00	2.00	0.00
1,559.37	17.19	300.46	1,546.54	64.86	-110.27	127.93	2.00	2.00	0.00
1,600.00	17.19	300.46	1,585.35	70.95	-120.62	139.94	0.00	0.00	0.00
1,700.00	17.19	300.46	1,680.89	85.93	-146.09	169.49	0.00	0.00	0.00
1,800.00	17.19	300.46	1,776.42	100.91	-171.56	199.04	0.00	0.00	0.00
1,900.00	17.19	300.46	1,871.96	115.89	-197.03	228.59	0.00	0.00	0.00
2,000.00	17.19	300.46	1,967.49	130.87	-222.50	258.14	0.00	0.00	0.00
2,100.00	17.19	300.46	2,063.03	145.85	-247.97	287.69	0.00	0.00	0.00
2,200.00	17.19	300.46	2,158.56	160.83	-273.45	317.24	0.00	0.00	0.00
2,300.00	17.19	300.46	2,254.10	175.81	-298.92	346.79	0.00	0.00	0.00
2,400.00	17.19	300.46	2,349.63	190.79	-324.39	376.34	0.00	0.00	0.00
2,500.00	17.19	300.46	2,445.16	205.77	-349.86	405.89	0.00	0.00	0.00
2,600.00	17.19	300.46	2,540.70	220.76	-375.33	435.44	0.00	0.00	0.00
2,700.00	17.19	300.46	2,636.23	235.74	-400.80	464.99	0.00	0.00	0.00
2,800.00	17.19	300.46	2,731.77	250.72	-426.27	494.53	0.00	0.00	0.00
2,900.00	17.19	300.46	2,827.30	265.70	-451.74	524.08	0.00	0.00	0.00
2,976.10	17.19	300.46	2,900.00	277.10	-471.12	546.57	0.00	0.00	0.00
<b>Green River</b>									
3,000.00	17.19	300.46	2,922.84	280.68	-477.21	553.63	0.00	0.00	0.00
3,100.00	17.19	300.46	3,018.37	295.66	-502.68	583.18	0.00	0.00	0.00
3,181.26	17.19	300.46	3,096.00	307.83	-523.38	607.20	0.00	0.00	0.00
<b>Top of Birds Nest</b>									
3,200.00	17.19	300.46	3,113.90	310.64	-528.15	612.73	0.00	0.00	0.00
3,300.00	17.19	300.46	3,209.44	325.62	-553.62	642.28	0.00	0.00	0.00
3,400.00	17.19	300.46	3,304.97	340.60	-579.09	671.83	0.00	0.00	0.00
3,426.20	17.19	300.46	3,330.00	344.53	-585.77	679.57	0.00	0.00	0.00
<b>Base of Birds Nest</b>									
3,500.00	17.19	300.46	3,400.51	355.58	-604.56	701.38	0.00	0.00	0.00
3,600.00	17.19	300.46	3,496.04	370.57	-630.04	730.93	0.00	0.00	0.00
3,700.00	17.19	300.46	3,591.58	385.55	-655.51	760.48	0.00	0.00	0.00
3,734.99	17.19	300.46	3,625.00	390.79	-664.42	770.82	0.00	0.00	0.00
<b>Mahogany Bench</b>									
3,787.32	17.19	300.46	3,675.00	398.63	-677.75	786.29	0.00	0.00	0.00
<b>7 5/8"</b>									
3,800.00	17.19	300.46	3,687.11	400.53	-680.98	790.03	0.00	0.00	0.00
3,900.00	17.19	300.46	3,782.65	415.51	-706.45	819.58	0.00	0.00	0.00
4,000.00	17.19	300.46	3,878.18	430.49	-731.92	849.13	0.00	0.00	0.00
4,100.00	17.19	300.46	3,973.71	445.47	-757.39	878.68	0.00	0.00	0.00
4,200.00	17.19	300.46	4,069.25	460.45	-782.86	908.23	0.00	0.00	0.00





## QEP Resources, Inc.

## Planning Report



<b>Database:</b>	EDM_QEP	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Project:</b>	Red Wash	<b>MD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Site:</b>	23-23B PAD	<b>North Reference:</b>	True
<b>Well:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,300.00	17.19	300.46	4,164.78	475.43	-808.33	937.78	0.00	0.00	0.00
4,400.00	17.19	300.46	4,260.32	490.41	-833.80	967.33	0.00	0.00	0.00
4,500.00	17.19	300.46	4,355.85	505.39	-859.27	996.88	0.00	0.00	0.00
4,600.00	17.19	300.46	4,451.39	520.38	-884.74	1,026.43	0.00	0.00	0.00
4,700.00	17.19	300.46	4,546.92	535.36	-910.21	1,055.98	0.00	0.00	0.00
4,800.00	17.19	300.46	4,642.45	550.34	-935.68	1,085.53	0.00	0.00	0.00
4,900.00	17.19	300.46	4,737.99	565.32	-961.15	1,115.08	0.00	0.00	0.00
5,000.00	17.19	300.46	4,833.52	580.30	-986.63	1,144.63	0.00	0.00	0.00
5,100.00	17.19	300.46	4,929.06	595.28	-1,012.10	1,174.18	0.00	0.00	0.00
5,200.00	17.19	300.46	5,024.59	610.26	-1,037.57	1,203.73	0.00	0.00	0.00
5,300.00	17.19	300.46	5,120.13	625.24	-1,063.04	1,233.28	0.00	0.00	0.00
5,400.00	17.19	300.46	5,215.66	640.22	-1,088.51	1,262.83	0.00	0.00	0.00
5,500.00	17.19	300.46	5,311.19	655.20	-1,113.98	1,292.38	0.00	0.00	0.00
5,600.00	17.19	300.46	5,406.73	670.19	-1,139.45	1,321.93	0.00	0.00	0.00
5,700.00	17.19	300.46	5,502.26	685.17	-1,164.92	1,351.48	0.00	0.00	0.00
5,741.59	17.19	300.46	5,542.00	691.40	-1,175.51	1,363.77	0.00	0.00	0.00
<b>Base of Mod Saline</b>									
5,800.00	17.19	300.46	5,597.80	700.15	-1,190.39	1,381.03	0.00	0.00	0.00
5,900.00	17.19	300.46	5,693.33	715.13	-1,215.86	1,410.58	0.00	0.00	0.00
6,000.00	17.19	300.46	5,788.87	730.11	-1,241.33	1,440.13	0.00	0.00	0.00
6,100.00	17.19	300.46	5,884.40	745.09	-1,266.80	1,469.68	0.00	0.00	0.00
6,200.00	17.19	300.46	5,979.94	760.07	-1,292.27	1,499.23	0.00	0.00	0.00
6,300.00	17.19	300.46	6,075.47	775.05	-1,317.74	1,528.78	0.00	0.00	0.00
6,351.85	17.19	300.46	6,125.00	782.82	-1,330.95	1,544.10	0.00	0.00	0.00
<b>Wasatch</b>									
6,400.00	17.19	300.46	6,171.00	790.03	-1,343.22	1,558.33	0.00	0.00	0.00
6,500.00	17.19	300.46	6,266.54	805.01	-1,368.69	1,587.88	0.00	0.00	0.00
6,600.00	17.19	300.46	6,362.07	820.00	-1,394.16	1,617.43	0.00	0.00	0.00
6,700.00	17.19	300.46	6,457.61	834.98	-1,419.63	1,646.98	0.00	0.00	0.00
6,800.00	17.19	300.46	6,553.14	849.96	-1,445.10	1,676.53	0.00	0.00	0.00
6,900.00	17.19	300.46	6,648.68	864.94	-1,470.57	1,706.08	0.00	0.00	0.00
7,000.00	17.19	300.46	6,744.21	879.92	-1,496.04	1,735.62	0.00	0.00	0.00
7,100.00	17.19	300.46	6,839.74	894.90	-1,521.51	1,765.17	0.00	0.00	0.00
7,200.00	17.19	300.46	6,935.28	909.88	-1,546.98	1,794.72	0.00	0.00	0.00
7,300.00	17.19	300.46	7,030.81	924.86	-1,572.45	1,824.27	0.00	0.00	0.00
7,400.00	17.19	300.46	7,126.35	939.84	-1,597.92	1,853.82	0.00	0.00	0.00
7,476.34	17.19	300.46	7,199.28	951.28	-1,617.37	1,876.38	0.00	0.00	0.00
7,500.00	16.83	300.46	7,221.90	954.79	-1,623.33	1,883.30	1.50	-1.50	0.00
7,600.00	15.33	300.46	7,317.99	968.83	-1,647.21	1,911.01	1.50	-1.50	0.00
7,700.00	13.83	300.46	7,414.76	981.60	-1,668.91	1,936.18	1.50	-1.50	0.00
7,800.00	12.33	300.46	7,512.16	993.07	-1,688.42	1,958.82	1.50	-1.50	0.00
7,900.00	10.83	300.46	7,610.13	1,003.25	-1,705.73	1,978.89	1.50	-1.50	0.00
8,000.00	9.33	300.46	7,708.58	1,012.13	-1,720.82	1,996.40	1.50	-1.50	0.00
8,100.00	7.83	300.46	7,807.46	1,019.69	-1,733.68	2,011.32	1.50	-1.50	0.00
8,200.00	6.33	300.46	7,906.69	1,025.94	-1,744.31	2,023.65	1.50	-1.50	0.00
8,300.00	4.83	300.46	8,006.21	1,030.87	-1,752.69	2,033.38	1.50	-1.50	0.00
8,400.00	3.33	300.46	8,105.96	1,034.48	-1,758.83	2,040.50	1.50	-1.50	0.00
8,500.00	1.83	300.46	8,205.85	1,036.77	-1,762.71	2,045.01	1.50	-1.50	0.00
8,600.00	0.33	300.46	8,305.83	1,037.73	-1,764.34	2,046.89	1.50	-1.50	0.00
8,622.17	0.00	0.00	8,328.00	1,037.76	-1,764.40	2,046.96	1.50	-1.50	0.00
<b>Mesaverde</b>									
8,700.00	0.00	0.00	8,405.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
8,800.00	0.00	0.00	8,505.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00



## QEP Resources, Inc.

## Planning Report



<b>Database:</b>	EDM_QEP	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Project:</b>	Red Wash	<b>MD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Site:</b>	23-23B PAD	<b>North Reference:</b>	True
<b>Well:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,900.00	0.00	0.00	8,605.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,000.00	0.00	0.00	8,705.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,100.00	0.00	0.00	8,805.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,200.00	0.00	0.00	8,905.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,300.00	0.00	0.00	9,005.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,400.00	0.00	0.00	9,105.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,500.00	0.00	0.00	9,205.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,600.00	0.00	0.00	9,305.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,700.00	0.00	0.00	9,405.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,800.00	0.00	0.00	9,505.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
9,900.00	0.00	0.00	9,605.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,000.00	0.00	0.00	9,705.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,100.00	0.00	0.00	9,805.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,200.00	0.00	0.00	9,905.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,300.00	0.00	0.00	10,005.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,400.00	0.00	0.00	10,105.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,500.00	0.00	0.00	10,205.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,600.00	0.00	0.00	10,305.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,696.17	0.00	0.00	10,402.00	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
Neslen									
10,700.00	0.00	0.00	10,405.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,800.00	0.00	0.00	10,505.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
10,900.00	0.00	0.00	10,605.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
11,000.00	0.00	0.00	10,705.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
11,066.17	0.00	0.00	10,772.00	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
Lower Neslen									
11,100.00	0.00	0.00	10,805.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
11,200.00	0.00	0.00	10,905.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
11,251.17	0.00	0.00	10,957.00	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
Sego									
11,300.00	0.00	0.00	11,005.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
11,400.00	0.00	0.00	11,105.83	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00
11,451.17	0.00	0.00	11,157.00	1,037.76	-1,764.40	2,046.96	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
RW 5C1-23B	0.00	0.00	8,328.00	1,037.76	-1,764.40	7,247,463.800	2,254,191.000	40.195466	-109.302547
- plan hits target center									
- Circle (radius 150.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
3,787.32	3,675.00	7 5/8"	7-5/8	9-7/8	



**QEP Resources, Inc.**  
Planning Report



<b>Database:</b>	EDM_QEP	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Project:</b>	Red Wash	<b>MD Reference:</b>	RKB @ 5642.30usft (SST 54)
<b>Site:</b>	23-23B PAD	<b>North Reference:</b>	True
<b>Well:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.0		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,976.10	2,900.00	Green River				
3,181.26	3,096.00	Top of Birds Nest				
3,426.20	3,330.00	Base of Birds Nest				
3,734.99	3,625.00	Mahogany Bench				
5,741.59	5,542.00	Base of Mod Saline				
6,351.85	6,125.00	Wasatch				
8,622.17	8,328.00	Mesaverde				
10,696.17	10,402.00	Neslen				
11,066.17	10,772.00	Lower Neslen				
11,251.17	10,957.00	Sego				



Sundry Number: 36040 API Well Number: 43047523120000

Company Name: QEP ENERGY (UT)



Azimuths to True North  
Magnetic North: 10.95°  
Magnetic Field  
Strength: 52408.45nT  
Dip Angle: 66.05°  
Date: 12/7/2011  
Model: IGRF2010

Project: Red Wash  
Site: 23-23B PAD  
Well: RW 5C1-23B  
Wellbore: Original Hole  
Design: Plan ver.0

WELL DETAILS: RW 5C1-23B

+N/-S	+E/-W	Northing	Easting	Ground Level: 5625.30	Latitude	Longitude	Slot
0.00	0.00	7246469.906	2255980.282		40.192617	-109.296231	

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well RW 5C1-23B, True North  
Vertical (TVD) Reference: RKB @ 5642.30usft (SST 54)  
Section (VS) Reference: Slot - (0.00N, 0.00E)  
Measured Depth Reference: RKB @ 5642.30usft (SST 54)  
Calculation Method: Minimum Curvature

PROJECT DETAILS: Red Wash

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Utah Central Zone

System Datum: Mean Sea Level

DESIGN TARGET DETAILS

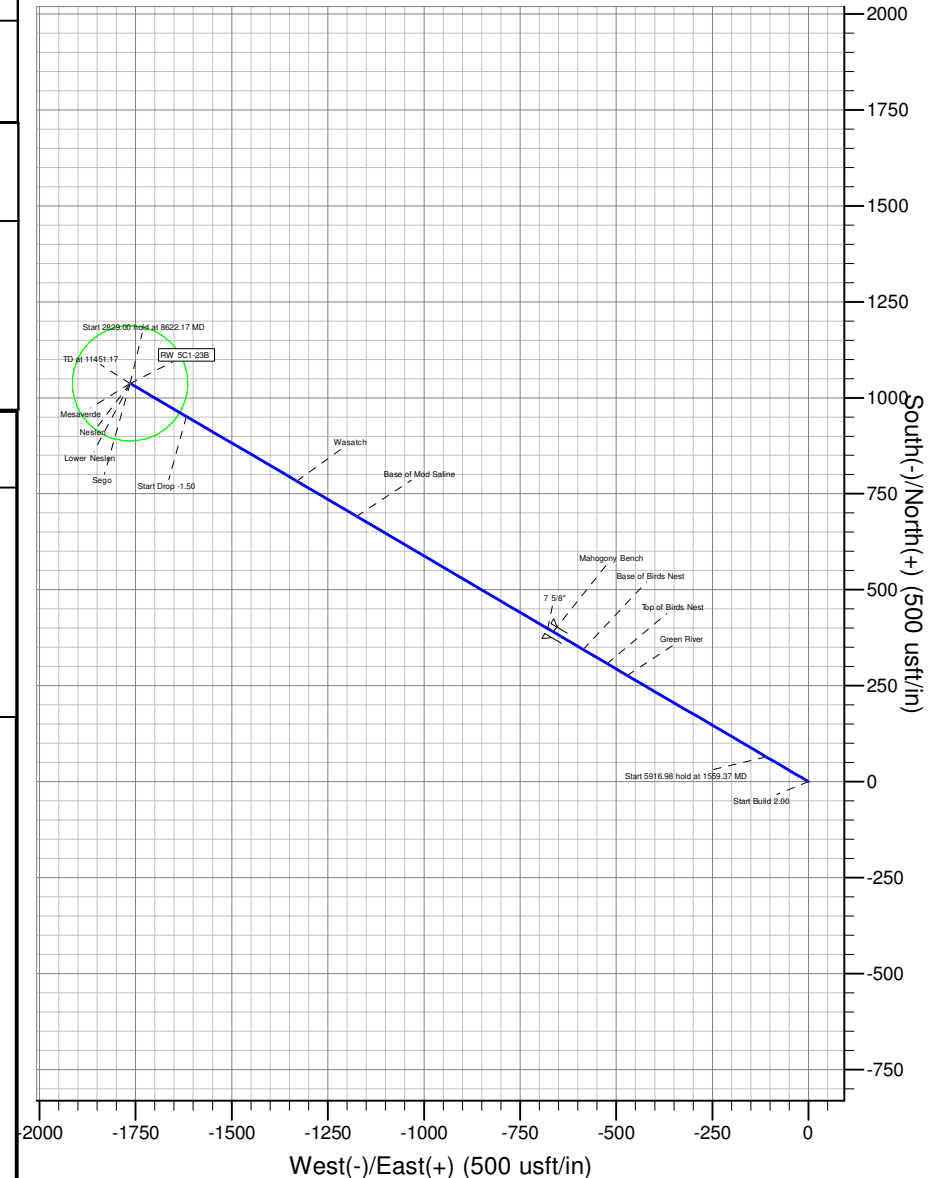
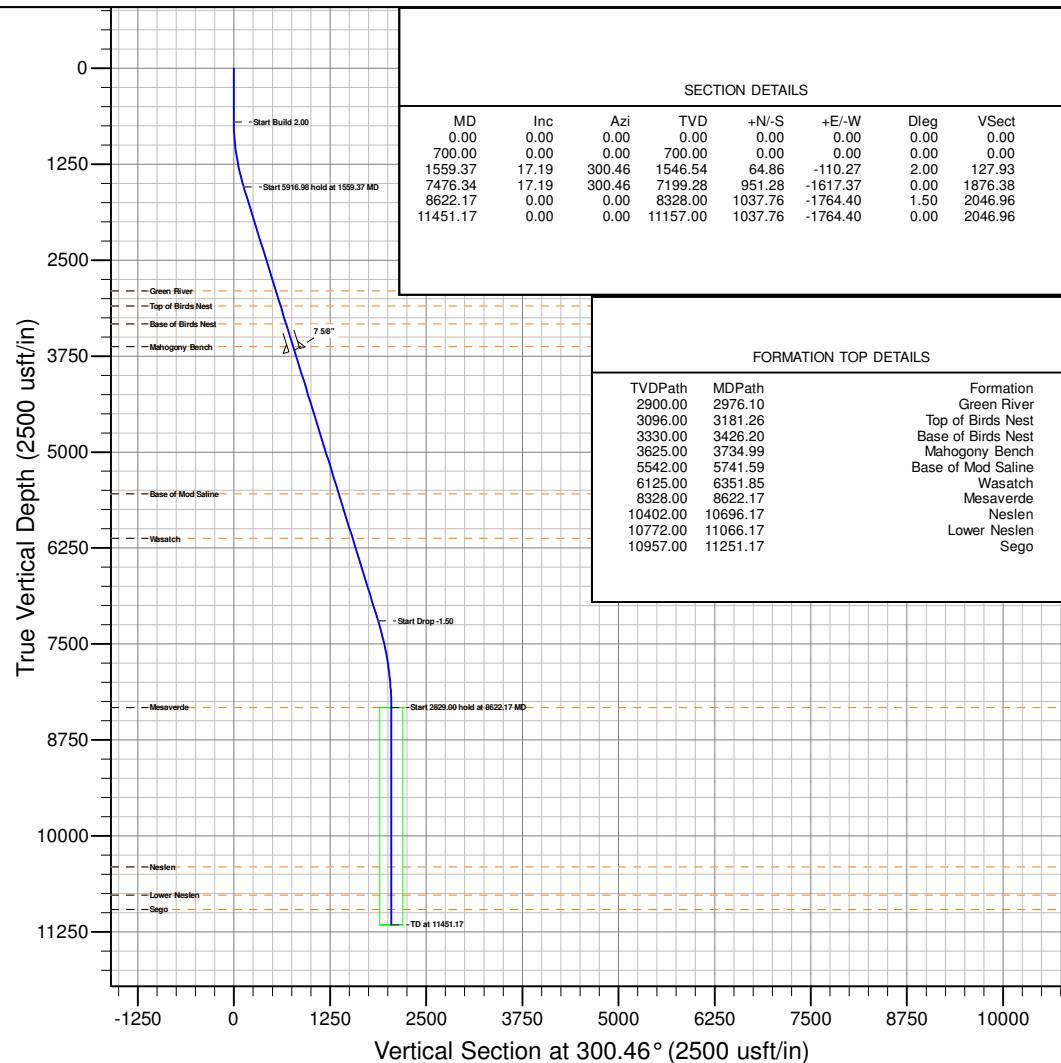
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
RW 5C1-23B	8328.00	1037.76	-1764.40	7247463.800	2254191.000	Circle (Radius: 150.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00
1559.37	17.19	300.46	1546.54	64.86	-110.27	2.00	127.93
7476.34	17.19	300.46	7199.28	951.28	-1617.37	0.00	1876.38
8622.17	0.00	0.00	8328.00	1037.76	-1764.40	1.50	2046.96
11451.17	0.00	0.00	11157.00	1037.76	-1764.40	0.00	2046.96

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2900.00	2976.10	Green River
3096.00	3181.26	Top of Birds Nest
3330.00	3426.20	Base of Birds Nest
3625.00	3734.99	Mahogany Bench
5542.00	5741.59	Base of Mud Saline
6125.00	6351.85	Wasatch
8328.00	8622.17	Mesaverde
10402.00	10696.17	Neslen
10772.00	11066.17	Lower Neslen
10957.00	11251.17	Sego



RECEIVED: Apr. 01, 2013



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047523120000
<b>9. FIELD and POOL or WILDCAT:</b> RED WASH		<b>COUNTY:</b> Uintah
<b>STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/30/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 NO ACTIVITY ON THIS WELL DURING THE MONTH OF APRIL 2013.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 May 02, 2013

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/2/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047523120000
<b>9. FIELD and POOL or WILDCAT:</b> RED WASH		<b>COUNTY:</b> UINTAH
<b>STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/31/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 NO ACTIVITY ON THIS WELL DURING THE MONTH OF MAY 2013.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 June 12, 2013

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/10/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047523120000
<b>9. FIELD and POOL or WILDCAT:</b> RED WASH		<b>COUNTY:</b> UINTAH
<b>STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 6/30/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

NO ACTIVITY ON THIS WELL DURING THE MONTH OF JUNE 2013.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 July 02, 2013

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/2/2013	

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator QEP Rig Name/# SST 54 Submitted  
By MURRAY BECKER Phone Number 435-828-0315

Well Name/Number RW 5c1-23B  
Qtr/Qtr NE/SW Section 23 Township 7 S Range 23 E\_  
Lease Serial Number UTU 082  
API Number 43047523120000

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 7/27/2013 01:00 AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time \_ \_ \_ AM ☐ PM ☐

RECEIVED

JUL 26 2013

DIV. OF OIL, GAS & MINING



## BLM - Vernal Field Office - Notification Form

Operator QEP Rig Name/# SST 54 SubmittedBy MURRAY BECKER Phone Number 435-828-0315Well Name/Number RW 5c1-23BQtr/Qtr NE/SW Section 23 Township 7 S Range 23 ELease Serial Number UTU 082API Number 43047523120000

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing  
☐ Intermediate Casing  
☐ Production Casing  
☐ Liner  
☐ Other

Date/Time 7/27/2013 01:00 AM ☐ PM ☐BOPE

- ☐ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

RECEIVED

JUL 26 2013

DIV. OF OIL, GAS &amp; MINING

Remarks we are going to log with drill pipe and lay down drill pipe when coming out of hole with logs. We will start to run casing after pipe is layed down and logs are retrived.

---

## BLM - Vernal Field Office - Notification Form

Operator QEP Rig Name/# SST 54 Submitted  
By MURRAY BECKER Phone Number 435-828-0315

Well Name/Number RW 5c1-23B  
Qtr/Qtr NE/SW Section 23 Township 7 S Range 23 E\_  
Lease Serial Number UTU 082  
API Number 43047523120000

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 7/27/2013 01:00 AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

**RECEIVED****JUL 26 2013**

DIV. OF OIL, GAS &amp; MINING

Remarks we are going to log with drill pipe and lay down drill pipe when coming out of hole with logs. We will start to run casing after pipe is layed down and logs are retrived.

---



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU082
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> RED WASH
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> RW 5C1-23B
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1759 FSL 2106 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 23 Township: 07.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047523120000
<b>9. FIELD and POOL or WILDCAT:</b> RED WASH		<b>COUNTY:</b> Uintah
<b>STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION	OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <b>8/18/2013</b>	<input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME		
<input type="checkbox"/> SPUD REPORT Date of Spud:				
<input type="checkbox"/> DRILLING REPORT Report Date:				

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 THIS WELL COMMENCED PRODUCTION ON AUGUST 18, 2013 @7:00 A.M.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 September 12, 2013

<b>NAME (PLEASE PRINT)</b> Benna Muth	<b>PHONE NUMBER</b> 435 781-4320	<b>TITLE</b> Regulatory Assistant
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/19/2013	

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____						5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UTU082</b>			
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____						6. IF INDIAN, ALLOTTEE OR TRIBE NAME			
2. NAME OF OPERATOR: <b>QEP ENERGY COMPANY</b>						7. UNIT or CA AGREEMENT NAME: <b>RED WASH</b>			
3. ADDRESS OF OPERATOR: <b>11002 E. 17500 S. CITY VERNAL STATE UT ZIP 84078</b>						8. WELL NAME and NUMBER: <b>RW 5C1-23B</b>			
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>NESW, 1759' FSL, 2106' FWL</b>  AT TOP PRODUCING INTERVAL REPORTED BELOW: <b>NESW, 1759' FSL, 2106' FWL</b>  AT TOTAL DEPTH: <b>SWNW, 2515' FNL, 360' FWL</b>						9. API NUMBER: <b>4304752312</b>			
10. FIELD AND POOL, OR WILDCAT <b>RED WASH</b>						11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NESW 23 7S 23E</b>			
12. COUNTY <b>UINTAH</b>						13. STATE <b>UTAH</b>			
14. DATE SPUDDED: <b>9/2/2012</b>		15. DATE T.D. REACHED: <b>7/25/2013</b>		16. DATE COMPLETED: <b>8/13/2013</b>		17. ELEVATIONS (DF, RKB, RT, GL): <b>5626' GL</b>			
18. TOTAL DEPTH: MD <b>11,180</b> TVD <b>10,874</b>		19. PLUG BACK T.D.: MD _____ TVD _____		20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE PLUG SET: MD _____ TVD _____			
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  <b>CBL</b>				23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)					
24. CASING AND LINER RECORD (Report all strings set in well)									
HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
12.25	7.625 L-80	26.4	0	207					
9.875	7.625 L-80	26.4	207	3,818		915	300	210	
6.75	4.5 HCD	11.6	0	11,180		1,105	371		
25. TUBING RECORD									
SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	
2.375	10,970								
26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) MESA VERDE	10,536	11,081			10,536 11,081	.42	115	Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.									
DEPTH INTERVAL		AMOUNT AND TYPE OF MATERIAL							
10,536 - 11,081		11,187 BBLS SLICKWATER; 244,774 LBS 30/50 SAND							
29. ENCLOSED ATTACHMENTS:								30. WELL STATUS:	
<input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION				<input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> CORE ANALYSIS				<input type="checkbox"/> DST REPORT <input checked="" type="checkbox"/> OTHER: <b>OPS SUMMARY</b>	
								<b>PGW</b>	

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 8/18/2013	TEST DATE: 8/22/2013	HOURS TESTED: 24	TEST PRODUCTION RATES: →	OIL – BBL: 16	GAS – MCF: 1,268	WATER – BBL: 584	PROD. METHOD: FLOWS
CHOKE SIZE: 20/64	TBG. PRESS. 911	CSG. PRESS. 1,638	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER	2,955
				MAHOGANY MARKER	3,736
				WASATCH	6,232
				MESA VERDE	8,608
				SEGO	11,100

## 35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) BENNA MUTH

TITLE REGULATORY ASSISTANT - CONTRACT

SIGNATURE

*Benna Muth*

DATE 9/17/2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation

- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940





QEP Energy Company

## Daily Activity and Cost Summary

Well Name: RW 5C1-23B

API 43-047-52312	Surface Legal Location 023007S023E27	Field Name RED WASH	State UTAH	Well Configuration Type Vertical
Ground Elevation (ft) 5,625.3	Casing Flange Elevation (ft) 5,625.30	Current KB to GL (ft) 22.80	KB to CF (ft) 22.80	Spud Date 9/12/2012 19:00
				Final Rig Release 7/28/2013 18:00

Job Category DRILLING	Primary Job Type DRILLING	Secondary Job Type DEVELOPMENT	Objective
Start Date 4/20/2013		Job End Date 7/28/2013	

Purpose

Summary

Contractor SST Energy	RIG SST 54	Rig Type
Contractor SST Energy	RIG SST 54	Rig Type

DOL	Start Date	Summary
1.0	8/7/2012	PRE-SPUD COSTS
2.0	4/20/2013	SKID RIG, RIG UP AFTER SKID, WELD AND NIPPLE UP CONDUCTOR, DRILL 12 1/4" HOLE
3.0	4/21/2013	DRILL 12 1/4" HOLE, TRIP OUT CHANGE BIT TO 9 5/8" INSTALL MWD, TRIP IN HOLE, DRILL 9 5/8" SURFACE HOLE, RIG SERVICE, DRILL
4.0	4/22/2013	RIG SERVICE, DRILL SURFACE, WIPER TRIP @ 2500', DRILL
5.0	4/23/2013	DRILL TO T.D. @ 3818', PUMP HI VIS SWEEP AND CIRCULATE BOTTOMS UP, WIPER TRIP TO CONDUCTOR, CIRCULATE AND MIX LCM, PUMP HI VIS SWEEP, TRIP OUT TO RUN CASING, RUN CASING AND CIRCULATE
6.0	4/24/2013	WAIT ON CEMENT FROM VERNAL, RIG UP CEMENTERS AND CEMENT 7 5/8" SURFACE PIPE, WAIT ON CEMENT TO SET, RUN 1" AND TOP OUT, WAIT ON CEMENT, CUT CASING, CONDUCTOR, WELD WELL HEAD
7.0	7/19/2013	SKID RIG, RIG UP, NIPPLE UP BOP
8.0	7/19/2013	NIPPLE UP BOP, TEST BOP, CUT DRILL LINE, INSTALL WEAR BUSHING, PICK UP DIRECTIONAL TOOLS, TRIP IN TO TAG FLOAT COLLAR, TRIP TO UNPLUG STRING
9.0	7/20/2013	DRILL FROM 4286' TO 5230', ROUTINE RIG SERVICE, DRILL FROM 5230' TO 6363', SURVEYS AND CONNECTIONS
10.0	7/21/2013	DRILL FROM 6363' TO 7118', ROUTINE RIG SERVICE, DRILL FROM 7118' TO 7307', CONNECTIONS AND SURVEY, DRILL FROM 7118' TO 8157'
11.0	7/22/2013	DRILL FROM 8157' TO 8535', ROUTINE RIG SERVICE, DRILL FROM 8535' TO 9353', CONNECTIONS AND SURVEYS,
12.0	7/23/2013	DRILL FROM 9353' TO 9952', ROUTINE RIG SERVICE, CIRCULATE FOR TRIP, TRIP OUT CHANGE BIT AND MOTOR, TRIP IN HOLE
13.0	7/24/2013	TRIP IN AND WASH TO BOTTOM, DIRECTIONAL DRILL, RIG SERVICE.
14.0	7/25/2013	DIRECTIONAL DRILL, CIRC. SHORT TRIP TO 6500 FT.
15.0	7/26/2013	TRIP OUT FOR LOGS, CUT DRILLING LINE, LAY DOWN BHA, RIG UP LOGGING BHA AND TOOL, TRIP IN HOLE, DIPLOY LOGS, TRIP OUT
16.0	7/27/2013	TRIP OUT W / LOGGING TOOL AND LAY DOWN DP, RUN CASING, CEMENT CASING
17.0	7/28/2013	SET AND TEST PACKOFF FOR CASING, NIPPLE DOWN BOP, CLEAN MUD TANKS.





## **QEP Energy Services**

**Red Wash  
RW 23-23B Pad  
RW 5C1-23B**

**RW 5C1-23B**

**Design: RW 5C1-23B**

## **Standard Survey Report**

**21 August, 2013**





# Native Navigation Survey Report



<b>Company:</b>	QEP Energy Services	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Project:</b>	Red Wash	<b>TVD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Site:</b>	RW 23-23B Pad	<b>MD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Well:</b>	RW 5C1-23B	<b>North Reference:</b>	True
<b>Wellbore:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	RW 5C1-23B	<b>Database:</b>	Compass DB Connection

<b>Project</b>	Red Wash		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		Using geodetic scale factor

<b>Site</b>	RW 23-23B Pad		
<b>Site Position:</b>		<b>Northing:</b>	7,246,686.310 usft
<b>From:</b>	Map	<b>Easting:</b>	2,256,158.369 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40.193199
		<b>Longitude:</b>	-109.295575
		<b>Grid Convergence:</b>	1.41 °

<b>Well</b>	RW 5C1-23B		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 7,246,469.906 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 2,255,980.282 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	5,625.30 usft
		<b>Latitude:</b>	40.192617
		<b>Longitude:</b>	-109.296231
		<b>Ground Level:</b>	5,625.30 usft

<b>Wellbore</b>	RW 5C1-23B		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	IGRF2010	4/10/2013	10.78
			<b>Dip Angle (°)</b>
			66.02
			<b>Field Strength (nT)</b>
			52,275

<b>Design</b>	RW 5C1-23B		
<b>Audit Notes:</b>			
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL
		<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>
	0.00	0.00	0.00
			<b>Direction (°)</b>
			299.97

<b>Survey Program</b>	Date 8/21/2013		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>
22.80	3,633.00	RW 5C1-23B Surface Svys (RW 5C1-23B)	NN MWD
3,859.00	11,180.00	RW 5C1-23B Prod Surveys (RW 5C1-23B)	NN MWD
			<b>Description</b>
			MWD - Standard
			MWD - Standard

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
22.80	0.00	0.00	22.80	0.00	0.00	0.00	0.00	0.00	0.00	
<b>RKB</b>										
143.00	0.53	86.20	143.00	0.04	0.55	-0.46	0.44	0.44	0.00	
235.00	0.62	82.90	234.99	0.13	1.47	-1.21	0.10	0.10	-3.59	
326.00	0.53	331.23	325.99	0.56	1.76	-1.25	1.05	-0.10	-122.71	
419.00	1.50	302.10	418.98	1.58	0.52	0.34	1.15	1.04	-31.32	
509.00	1.40	270.00	508.95	2.21	-1.58	2.47	0.90	-0.11	-35.67	
601.00	0.10	20.00	600.94	2.28	-2.67	3.46	1.56	-1.41	119.57	
693.00	0.50	39.50	692.94	2.67	-2.39	3.40	0.44	0.43	21.20	





# Native Navigation Survey Report



<b>Company:</b>	QEP Energy Services	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Project:</b>	Red Wash	<b>TVD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Site:</b>	RW 23-23B Pad	<b>MD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Well:</b>	RW 5C1-23B	<b>North Reference:</b>	True
<b>Wellbore:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	RW 5C1-23B	<b>Database:</b>	Compass DB Connection

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
783.00	1.90	300.00	782.92	3.72	-3.43	4.83	2.27	1.56	-110.56
874.00	3.80	298.50	873.80	5.91	-7.39	9.35	2.09	2.09	-1.65
966.00	4.90	303.60	965.54	9.54	-13.34	16.32	1.27	1.20	5.54
1,061.00	6.80	298.50	1,060.04	14.47	-21.66	25.99	2.07	2.00	-5.37
1,156.00	9.10	305.20	1,154.12	21.48	-32.75	39.10	2.61	2.42	7.05
1,251.00	10.60	308.80	1,247.72	31.29	-45.70	55.22	1.71	1.58	3.79
1,347.00	12.80	310.40	1,341.72	43.72	-60.68	74.40	2.32	2.29	1.67
1,442.00	15.20	312.00	1,433.89	58.87	-77.95	96.94	2.56	2.53	1.68
1,538.00	16.30	309.30	1,526.29	75.83	-97.73	122.54	1.38	1.15	-2.81
1,633.00	17.50	308.40	1,617.18	93.14	-119.24	149.82	1.29	1.26	-0.95
1,729.00	18.30	308.20	1,708.54	111.43	-142.40	179.02	0.84	0.83	-0.21
1,824.00	17.60	305.70	1,798.91	129.03	-165.78	208.07	1.10	-0.74	-2.63
1,919.00	19.80	304.90	1,888.89	146.62	-190.64	238.40	2.33	2.32	-0.84
2,015.00	21.40	303.20	1,978.75	165.52	-218.64	272.08	1.78	1.67	-1.77
2,110.00	22.70	305.40	2,066.80	185.63	-248.08	307.64	1.62	1.37	2.32
2,205.00	22.00	308.70	2,154.67	207.37	-276.91	343.48	1.51	-0.74	3.47
2,300.00	20.90	310.70	2,243.09	229.55	-303.65	377.71	1.39	-1.16	2.11
2,396.00	20.80	311.50	2,332.80	252.01	-329.40	411.24	0.31	-0.10	0.83
2,491.00	20.50	310.30	2,421.70	273.95	-354.72	444.13	0.55	-0.32	-1.26
2,585.00	19.40	308.50	2,510.06	294.31	-379.49	475.76	1.34	-1.17	-1.91
2,680.00	19.00	309.30	2,599.77	313.93	-403.80	506.63	0.50	-0.42	0.84
2,776.00	19.60	306.90	2,690.38	333.49	-428.77	538.03	1.04	0.63	-2.50
2,871.00	20.00	304.90	2,779.76	352.36	-454.84	570.04	0.83	0.42	-2.11
2,966.00	21.00	303.40	2,868.75	371.02	-482.38	603.21	1.19	1.05	-1.58
3,061.00	22.90	307.10	2,956.86	391.55	-511.33	638.55	2.47	2.00	3.89
3,156.00	25.50	312.40	3,043.52	416.49	-541.18	676.87	3.56	2.74	5.58
3,252.00	24.70	311.70	3,130.45	443.77	-571.42	716.69	0.89	-0.83	-0.73
3,347.00	21.50	310.30	3,217.82	468.24	-599.52	753.26	3.42	-3.37	-1.47
3,443.00	20.10	305.80	3,307.57	489.27	-626.32	786.98	2.21	-1.46	-4.69
3,538.00	18.20	302.00	3,397.31	506.68	-652.15	818.05	2.39	-2.00	-4.00
3,633.00	19.60	299.10	3,487.19	522.29	-678.65	848.81	1.77	1.47	-3.05
3,859.00	20.90	291.20	3,699.26	555.32	-749.38	926.57	1.34	0.58	-3.50
3,954.00	18.80	296.80	3,788.61	568.35	-778.84	958.61	2.98	-2.21	5.89
4,048.00	18.20	301.40	3,877.76	582.83	-804.89	988.41	1.68	-0.64	4.89
4,142.00	20.70	303.90	3,966.39	599.74	-831.22	1,019.67	2.80	2.66	2.66
4,236.00	20.50	302.60	4,054.38	617.88	-858.87	1,052.68	0.53	-0.21	-1.38
4,331.00	20.80	300.00	4,143.28	635.27	-887.50	1,086.17	1.02	0.32	-2.74
4,425.00	22.10	300.00	4,230.77	652.46	-917.27	1,120.54	1.38	1.38	0.00
4,520.00	23.60	298.60	4,318.31	670.50	-949.44	1,157.43	1.68	1.58	-1.47
4,614.00	21.40	301.30	4,405.15	688.42	-980.62	1,193.39	2.59	-2.34	2.87
4,708.00	16.20	299.60	4,494.11	703.82	-1,006.69	1,223.67	5.56	-5.53	-1.81
4,802.00	13.80	295.00	4,584.90	715.03	-1,028.26	1,247.95	2.85	-2.55	-4.89
4,897.00	13.10	292.40	4,677.30	723.92	-1,048.48	1,269.91	0.97	-0.74	-2.74



# Native Navigation Survey Report



<b>Company:</b>	QEP Energy Services	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Project:</b>	Red Wash	<b>TVD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Site:</b>	RW 23-23B Pad	<b>MD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Well:</b>	RW 5C1-23B	<b>North Reference:</b>	True
<b>Wellbore:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	RW 5C1-23B	<b>Database:</b>	Compass DB Connection

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,991.00	9.60	286.90	4,769.45	730.26	-1,065.83	1,288.11	3.89	-3.72	-5.85
5,085.00	10.30	288.00	4,862.03	735.14	-1,081.33	1,303.97	0.77	0.74	1.17
5,180.00	9.50	306.40	4,955.64	742.42	-1,095.72	1,320.07	3.42	-0.84	19.37
5,274.00	11.40	309.60	5,048.08	752.94	-1,109.12	1,336.94	2.11	2.02	3.40
5,369.00	10.10	310.60	5,141.41	764.35	-1,122.68	1,354.39	1.38	-1.37	1.05
5,463.00	9.80	312.90	5,233.99	775.16	-1,134.80	1,370.28	0.53	-0.32	2.45
5,558.00	12.60	312.90	5,327.18	787.72	-1,148.31	1,388.27	2.95	2.95	0.00
5,652.00	9.70	308.80	5,419.39	799.66	-1,162.00	1,406.09	3.20	-3.09	-4.36
5,747.00	14.40	316.60	5,512.28	813.27	-1,176.36	1,425.33	5.22	4.95	8.21
5,841.00	14.90	311.50	5,603.23	829.77	-1,193.45	1,448.37	1.47	0.53	-5.43
5,936.00	13.80	309.00	5,695.26	845.00	-1,211.40	1,471.53	1.33	-1.16	-2.63
6,030.00	13.90	306.50	5,786.53	858.77	-1,229.19	1,493.82	0.65	0.11	-2.66
6,124.00	14.10	304.90	5,877.74	872.03	-1,247.66	1,516.44	0.46	0.21	-1.70
6,218.00	15.40	303.00	5,968.64	885.38	-1,267.51	1,540.31	1.48	1.38	-2.02
6,313.00	14.40	295.70	6,060.45	897.38	-1,288.74	1,564.69	2.24	-1.05	-7.68
6,407.00	14.30	295.20	6,151.52	907.39	-1,309.78	1,587.92	0.17	-0.11	-0.53
6,502.00	14.00	294.60	6,243.64	917.17	-1,330.84	1,611.05	0.35	-0.32	-0.63
6,596.00	14.40	294.70	6,334.76	926.79	-1,351.80	1,634.01	0.43	0.43	0.11
6,691.00	14.20	294.00	6,426.82	936.46	-1,373.17	1,657.36	0.28	-0.21	-0.74
6,785.00	13.50	292.30	6,518.09	945.31	-1,393.86	1,679.70	0.86	-0.74	-1.81
6,880.00	13.20	292.50	6,610.52	953.67	-1,414.14	1,701.45	0.32	-0.32	0.21
6,974.00	13.40	293.50	6,702.00	962.12	-1,434.04	1,722.91	0.32	0.21	1.06
7,068.00	13.60	292.10	6,793.40	970.62	-1,454.27	1,744.68	0.41	0.21	-1.49
7,163.00	13.00	290.50	6,885.85	978.57	-1,474.63	1,766.29	0.74	-0.63	-1.68
7,257.00	12.50	290.50	6,977.54	985.83	-1,494.06	1,786.75	0.53	-0.53	0.00
7,351.00	11.10	286.20	7,069.55	991.92	-1,512.28	1,805.57	1.76	-1.49	-4.57
7,446.00	11.00	294.50	7,162.79	998.23	-1,529.31	1,823.48	1.68	-0.11	8.74
7,540.00	10.50	295.10	7,255.14	1,005.58	-1,545.23	1,840.94	0.55	-0.53	0.64
7,634.00	9.40	293.20	7,347.73	1,012.24	-1,560.04	1,857.10	1.22	-1.17	-2.02
7,729.00	10.90	302.00	7,441.25	1,020.06	-1,574.79	1,873.78	2.27	1.58	9.26
7,823.00	9.00	300.50	7,533.83	1,028.50	-1,588.66	1,890.02	2.04	-2.02	-1.60
7,917.00	7.50	291.60	7,626.86	1,034.49	-1,600.70	1,903.44	2.09	-1.60	-9.47
8,012.00	8.50	282.70	7,720.93	1,038.32	-1,613.32	1,916.28	1.67	1.05	-9.37
8,107.00	8.30	291.80	7,814.92	1,042.41	-1,626.53	1,929.77	1.41	-0.21	9.58
8,202.00	6.90	299.00	7,909.08	1,047.72	-1,637.89	1,942.27	1.78	-1.47	7.58
8,296.00	7.00	302.40	8,002.39	1,053.53	-1,647.67	1,953.63	0.45	0.11	3.62
8,390.00	8.70	290.00	8,095.52	1,059.03	-1,659.19	1,966.36	2.54	1.81	-13.19
8,485.00	9.40	284.70	8,189.33	1,063.46	-1,673.44	1,980.92	1.15	0.74	-5.58
8,579.00	8.20	283.50	8,282.23	1,066.97	-1,687.39	1,994.76	1.29	-1.28	-1.28
8,673.00	10.20	285.00	8,375.01	1,070.69	-1,701.94	2,009.23	2.14	2.13	1.60
8,768.00	9.70	282.10	8,468.58	1,074.54	-1,717.89	2,024.97	0.74	-0.53	-3.05
8,863.00	8.90	281.00	8,562.33	1,077.62	-1,732.93	2,039.54	0.86	-0.84	-1.16
8,957.00	7.60	281.00	8,655.36	1,080.20	-1,746.17	2,052.29	1.38	-1.38	0.00





# Native Navigation

## Survey Report



<b>Company:</b>	QEP Energy Services	<b>Local Co-ordinate Reference:</b>	Well RW 5C1-23B
<b>Project:</b>	Red Wash	<b>TVD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Site:</b>	RW 23-23B Pad	<b>MD Reference:</b>	RKB @ 5648.10usft (SST 54)
<b>Well:</b>	RW 5C1-23B	<b>North Reference:</b>	True
<b>Wellbore:</b>	RW 5C1-23B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	RW 5C1-23B	<b>Database:</b>	Compass DB Connection

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,051.00	6.90	275.80	8,748.61	1,081.95	-1,757.89	2,063.32	1.02	-0.74	-5.53
9,146.00	6.70	273.30	8,842.94	1,082.85	-1,769.10	2,073.48	0.38	-0.21	-2.63
9,240.00	2.70	243.20	8,936.62	1,082.17	-1,776.56	2,079.60	4.86	-4.26	-32.02
9,335.00	1.40	191.70	9,031.56	1,080.02	-1,778.79	2,080.46	2.24	-1.37	-54.21
9,429.00	2.50	164.10	9,125.51	1,076.92	-1,778.46	2,078.63	1.51	1.17	-29.36
9,524.00	3.20	154.00	9,220.39	1,072.55	-1,776.73	2,074.95	0.90	0.74	-10.63
9,618.00	1.20	171.90	9,314.32	1,069.21	-1,775.44	2,072.16	2.22	-2.13	19.04
9,713.00	2.20	161.40	9,409.27	1,066.50	-1,774.72	2,070.18	1.10	1.05	-11.05
9,808.00	1.60	165.40	9,504.22	1,063.49	-1,773.81	2,067.89	0.65	-0.63	4.21
9,902.00	1.60	160.00	9,598.18	1,060.99	-1,773.03	2,065.96	0.16	0.00	-5.74
9,966.00	2.10	168.10	9,662.15	1,059.00	-1,772.48	2,064.49	0.88	0.78	12.66
10,061.00	2.20	165.60	9,757.08	1,055.53	-1,771.67	2,062.06	0.14	0.11	-2.63
10,155.00	2.60	166.60	9,851.00	1,051.71	-1,770.72	2,059.33	0.43	0.43	1.06
10,250.00	2.70	167.10	9,945.90	1,047.43	-1,769.73	2,056.33	0.11	0.11	0.53
10,344.00	2.60	167.00	10,039.80	1,043.20	-1,768.75	2,053.37	0.11	-0.11	-0.11
10,439.00	2.80	155.00	10,134.69	1,038.99	-1,767.29	2,050.00	0.63	0.21	-12.63
10,533.00	3.30	156.90	10,228.56	1,034.42	-1,765.25	2,045.96	0.54	0.53	2.02
10,627.00	3.00	148.30	10,322.42	1,029.84	-1,762.90	2,041.63	0.59	-0.32	-9.15
10,722.00	2.90	145.60	10,417.29	1,025.74	-1,760.24	2,037.28	0.18	-0.11	-2.84
10,816.00	2.80	136.10	10,511.18	1,022.13	-1,757.30	2,032.93	0.51	-0.11	-10.11
10,910.00	2.90	150.30	10,605.06	1,018.41	-1,754.53	2,028.67	0.76	0.11	15.11
11,005.00	3.25	146.60	10,699.93	1,014.07	-1,751.86	2,024.19	0.42	0.37	-3.89
11,099.00	3.10	139.00	10,793.78	1,009.93	-1,748.72	2,019.40	0.47	-0.16	-8.09
11,128.00	3.30	138.40	10,822.74	1,008.71	-1,747.65	2,017.87	0.70	0.69	-2.07
11,180.00	3.30	138.40	10,874.65	1,006.48	-1,745.67	2,015.03	0.00	0.00	0.00
Proj @ TD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
22.80	22.80	0.00	0.00	RKB
11,180.00	10,874.65	1,006.48	-1,745.67	Proj @ TD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_